

A DIEBOLD READER

Including news, research and opinion

Collected by friends of honest, open and verifiable elections

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INTRODUCTION

Included here are reports and articles, facts and opinion pieces about electronic voting equipment, specifically about the equipment produced by the Diebold Election Systems.

Compilations of documented facts, question and answer formats, studied reports, and speculative criticism delineate the serious concerns that many have about inadequate, flawed, and faulty equipment whose many errors and inadequacies guarantee a false result.

We question the expenditure of hundreds of millions of dollars in taxpayer funds paid to companies which are in business to make many millions of dollars; specifically, tax dollars paid for a product that many of us do not believe is trustworthy, and do believe is open to fraud.

When the voting and vote counting processes are not transparent and verifiable to all, how can we believe in the results? Is that any way to run a democracy?

This collection is a work in progress. We will be updating it periodically.

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A DIEBOLD READER

Overview

O-1. Diebold in the News—A Partial List of Events from votersunite.org (20 pages)
<http://www.votersunite.org/info/Dieboldinthenews.pdf>
Detailing thirty-seven incidences of serious malfunction of Diebold equipment

O-2. Confusion of Myth and Fact in Maryland, July 19, 2004, part of Voting and Elections web pages by Douglas Jones, <http://www.truevotemd.org/myth-fact-md.html>
A myth vs fact assessment of electronic voting including follow up on each issue where the manufacturers' claims contradict known facts (13 pages)

O-3. Worse Than 2000: Tuesday's Electoral Disaster by William Rivers Pitt. November 8, 2004, http://www.truthout.org/docs_04/110804A.shtml
"Everyone remembers Florida's 2000 election debacle ... what happened during the Presidential election of 2004, in Florida, in Ohio, and in a number of other states as well, was worse ..."

News

****State expected to OK new voting system by Ian Hoffman, Daily Review 6/10/05,**
http://www.insidebayarea.com/portlet/article/html/fragments/print_article.jsp?article=2794606
Despite poor performance, paper feed problems, previous criminal charges, ignoring state rules for certification, redaction of expert findings in reports of state's only consultant

N- 1. Consumer Report Series—Following the Money Trail—Part I, from Consumer Protections for Elections, blackbox voting.org, 5-9-2005. <http://www.bbvfforums.org/cgi-bin/forums/board-auth.cgi?file=/1954/5727.html>
"Large payments from Diebold are fueling influence-peddling for a \$45 million Cook County/Chicago voting machine contract ..."

N-2. Emerging Scandal on MD Voting Machine Performance: All Diabold Machines on Lockdown in Montgomery Co. Maryland from TrueVoteMD.org.—March 8, 2005
http://truevotemd.org/Press_releases/html/2005-03-08_Press_Release.html
All equipment on lockdown due to statewide machine failures including 12% of machines in county, some of which lost votes in significant numbers

N-3. The Case Against Diebold Election Systems from OpenVoting.Org —April 27, 2005.
www.OpenVoting.org
Highlights history of key Diebold staff members; significant software and hardware problems

N-4. Discrepancies found in 35 percent of Miami-Dade Precincts by Jessica M. Walker, May 6, 2005, <http://www.votersunite.org/info/content/newmessup-17.asp>
Discrepancies cast doubt on ability to check the accuracy of the machines —manufacturer ES&S did not respond to request for comment

N-5. Hack of Real Life Voting System, March 9, 2005,blackboxvoting.
<http://www.bbvfforums.org/cgi-bin/forums/board-auth.cgi?file=/1954/3826.html>
Hacking of Diebold system demonstrated; password and access to the system demonstrated to be widely accessible

N-6. Diebold Lobbyist Document, 4/18/2005, blackboxvoting. <http://www.bbvfforums.org/cgi-bin/forums/board-auth.cgi?file=/1954/4447.html>
Diebold lobbying fees underreported.

N-7. Corporate Control of Voting Equipment Certification by John Gideon, June 2005
http://www.votetrustusa.org/index.php?option=com_content&task=view&id=73&Itemid=30
How did the Sequoia VeriVote Printer System Get Qualified and Then Certified in California?

N-8. Printer fails to satisfy e-vote activists by Rachel Conrad, AP, February 3, 2005, Monterey Herald. www.montereyherald.com/mld/montereyherald/news/politics/10809627.htm?template+...
Paper printers don't satisfy transparency requirements of computer scientists.

N-9. The New Diebold Printers by John Gideon,
<http://www.votetrustusa.org/blogs/newdieboldprinters.htm>

N-10. Optical Scan System hacked, May 27, 2005. <http://www.bbvforums.org/cgi-bin/forums/board-auth.cgi?file=/1954/5921.html>

History

H-1. List of Diebold Contributions to George Bush, <http://www.solarbus.org/election/articles/0330-diebold-bush.shtml>
Establishing obvious Republican Party affiliations.

H-2. Solano County pays \$415,000 to get out of e-voting contract, September 1, 2004, AP wire, <http://www.montereyherald.com/mld/montereyherald/news/9554813.htm?template=contentM...>
Expensive mistake.

H-3. Democracy Fails: Corporations Win By Peter Phillips, Project Censored, November 2004, http://www.publicdomainprogress.info/archives/2004_12_01_archive.html
"The largest investors in ES&S, Diebold, and Sequoia are government defense contractors Northrup-Gumman, Lockheed Martin, Electronic Data Systems ..."--Peter Phillips Really?

H-4. Diebold, electronic voting and the vast right-wing conspiracy by Bob Fittrakis, February 24, 2004, <http://www.freepress.org/columns/display/3/2004/834>
"A joint study by California and MIT following the 2000 election determined that between 1.5 and 2 million votes were not counted due to confusing paper ballots or faulty equipment.... "Wherever Diebold and ES&S go, irregularities and historic Republican upsets follow." --Bob Fittrakis

H-5. Was the 2004 Election Stolen?, by Joel Bleifuss, December 10, 2004, <http://www.inthesetimes.com/site/main/print/1742>

Assessment of conspiracy theorists, accuracy of exit polls, mystery votes."So somebody could have hacked the vote."--Joel Bleifuss

H-6. Dieing for Bold Data: The History and Facts on a Controversial Data Mining Company, October 12, 2004, <http://www.campaignaudit.org/articles/diebold.html>

Business history, ties to Republican Party "The fear is that Diebold's e-voting system is too easily susceptible to hacking and software bugs."--Andrew Ralston and Peter Fotheringham.

H-7. Voting Machines Violate Constitution: Who Will Launch Legal Challenge? By Lynn Landes, April 15, 2003, <http://www.ecotalk.org/VotingMachinesUnconstitutional.htm>

"Significant case law that upholds the constitutional right to have votes cast and counted properly." --Lynn Landes

H-8. Sham Recount Process on Diebold E-Voting Machines. January 13, 2005, Kansas City Info ZineSham Recount Process on Diebold E-voting Machines *"Major problems conducting a recount with Diebold electronic voting machines" in Alameda County.*

Instant Runoff Voting in Alameda County

--collection of documents (12 pages) collected by Chris Jerdonek, jerdonek@fairvote.org

Statistics--Appendices

A. Analysis of the 2004 Presidential Election Exit Poll Discrepancies, National Election Data Archive Project, Arch 32, March 2005, updated April 12, 2005 (30 pages)
[http://electionarchive.org/ucvAnalysis/US/Exit Polls 2004 Mitofsky-Edison.pdf](http://electionarchive.org/ucvAnalysis/US/Exit%20Polls%202004%20Mitofsky-Edison.pdf)
Response to the Edison/Mitofsky Election System 2004 Report <http://exit-poll.net/election-night/EvaluationJan192005.pdf>

B. EPIC Public Information Requests to States on DRE Voting Technology, www.epic.org (4 pages)
<http://www.epic.org/privacy/voting/foia/default.html> (Then Diebold pdf) under Texas subhead

State of Texas Report of Examination of Diebold Election Systems Accu-Vote TS Ballot Station v4.1.15 (19 pages)
<http://www.epic.org/privacy/voting/foia/default.html> (Then Diebold pdf) under Texas subhead.

Demonstrating consistent negative reports recommending against certification, suddenly reversed with no accompanying data or reports.

New

C. US Count Votes National Election Data Archive Project Working Paper: Patterns of Exit Poll Discrepancies, May 5, 2005, (pp. 1-5 included here).
http://uscountvotes.org/ucvAnalysis/US/exit-polls/USCV_exit_poll_simulations.pdf

More Bibliography

Diebold May Face Criminal Charges, April 23, 2004, Wired Magazine.
<http://www.truthout.org/cgi-bin/art,am/exec/view.cgi/8/4265>

More Troubles for Diebold, October 4, 2004, New York Times Editorial.

Ohio's Odd Numbers, By Christopher Hitchens, March 2005, vanityfair.com-- *"The Diebold Company, which also manufactures ATMs, should not receive another dime until it can produce a voting system that is similarly reliable."*—Christopher Hitchens.

On the Voting Machine Makers Tab, September 12, 2004, New York Times Editorial— *Close ties of state election officials to the voting machine industry. "even while in office, many officials are happy to accept voting companies' largess... now the public is quite rightly insisting on greater transparency and more say in decisions."*—New York Times.

Diebold in the News – A Partial List of Events

"A common practice for local election officials is to let election companies run their election – make up their ballot, set up their machines, and even count their tallies. This is a dangerous practice." ~ *Ted Selker, Cal Tech/MIT Voting Technology Project.*¹

| Date | Subject | Place/Description |
|---------------|-----------------------|--|
| 1998 | AccuVote OS | Pima County, Arizona. For the third time in as many elections, Pima County, Arizona, found errors in the tally. The computers recorded no votes for 24 precincts in the 1998 general election, but voter rolls showed thousands had voted at those polling places. Pima was using Global Election Systems machines, which now are sold under the Diebold company name. ² |
| November 2000 | AccuVote Optical Scan | Bernalillo County, New Mexico. Election officials in the state's most populous county found that a flaw in the ballot programming caused 67,000 absentee and early-voting ballots to be incorrectly counted following the Nov. 7 presidential election. ³ The tabulation system and software worked correctly, but a county technical employee failed to set up an element of the system properly, said Frank Kaplan, Global's Western regional manager. New Mexico's ballots are designed for voting by party, but voters can choose candidates from other parties. A programmer did not link the candidates' names to their respective parties. "The problem took 22 minutes for us to fix," he said. "It was just a matter of clicking on the correct link." |

¹ Touch to Vote: More Americans to Vote on Electronic, Touch-Screen Systems in November. ABC News, July 18, 2004. http://www.abcnnews.go.com/sections/WNT/Politics/e-voting_040718-2.html

² Computer fails to record 9,675 Pima County votes. The Arizona Daily Star, 11 Nov. 1998. Referenced in *Black Box Voting*, by Bev Harris, Chapter 2.

³ Human error is cause of N.M. election glitch. Government Computer News, November 20, 2000; Vol. 19 No. 33, By Donna Young http://www.gcn.com/vol19_no33/news/3307-1.html

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
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| November 2000 | AccuVote OS | <p>Volusia County, Florida. Internal Diebold memos (leaked in 2003) show that the company officials knew about the 16,022 Gore votes that were subtracted, and they still don't have an explanation for why the votes were lost. Tampering may have been the cause.</p> <p>The memos show that more than a year ago, Diebold knew of a problem with the Florida 2000 election - where a memory card inexplicably subtracted 16,022 votes from a total previously recorded for Vice President Al Gore.</p> <p>Tampering was one of four possible causes Diebold couldn't rule out at the time, the memos show. A year later, Diebold's latest official position on Florida's Volusia County vote count still does not rule out tampering. Company spokesman Bear said recently only that he was not familiar with the aberrant vote count in Volusia County.</p> <p>"The problem precinct had two memory cards uploaded," wrote Diebold tech Tab Iredale in one of the memos among Diebold employees. "There is always the possibility that 'the second memory card' came from an unauthorized source."</p> <p>Allen said, "The e-mails confirmed what we suspected - Diebold upper management knew of the problem."⁴</p> |
| August 2002 | Central count optical scan | <p>Clay County, Kansas. The machine showed that the challenger (Jennings) had won, but a hand recount showed that the incumbent commissioner (Mayo) won by a landslide -- 540 votes to 175.</p> <p>In one ward, which Mayo carried 242-78, the computer had mistakenly reversed the totals.⁵</p> <p>This statement suggests that the computer in the "one ward" had the candidates mis-mapped to the table that holds the voting results.</p> |
| November 2002 | AccuVote TS | <p>Maryland. When voters voted for the Republican candidate for governor, an 'X' appeared beside the name of the Democratic candidate.</p> <p>"I pushed a Republican ticket for governor and his name disappeared," said Kevin West of Upper Marlboro. "Then the Democrat's name got an 'X' put in it."⁶</p> <p>Other voters saw a banner announcing "Democrat" at the top of their screen regardless of their choice.</p> |

⁴ [Tulare] County votes for machines. By Roger Phelps, The Porterville Recorder; June 10, 2004. http://myopr.com/articles/2004/06/10/news/local_state/news01.txt

⁵ Aug. 6 ballot problems alleged: Clay, Barton county candidates seek review of races. Lawrence Journal-World. August 22, 2002. The Associated Press. <http://www.ljworld.com/section/election02/story/103526>

⁶ Glitches cited at some polls. The Washington Times, 6 November 2002; Referenced in *Black Box Voting*, by Bev Harris. Chapter 2.

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| November 2002 | AccuVote OS | Robeson County, North Carolina. ⁷ Ballot tabulating machines failed to work properly in 31 of 41 precincts. Local election officials said the problem was the result of a software glitch, and ballots had to be recounted. |
| | | In a January 2004 interview with Dinah in the office of the Robeson County Director of Elections, she said that there had been a problem in the programming of the memory cards and all the ballots had been recounted by hand. |
| April 2003 | AccuVote TS | Johnson County, Kansas. An unexplained software error caused the voting computers to miscount the votes. In the April 2002 municipal elections, some modems used to transmit results from polling places to the central election office failed. The county no longer transmits results from polling places to the central election office via modem; cartridges that record results are hand-delivered to the office. Also, results were misreported in six races. The system miscounted hundreds of votes, and a re-count was ordered. ... Diebold investigated the problem and said in a news release issued at the time that a software error had led to the election night problem. ⁸ |
| October 2003 | GEMS - Election Management Systems | Alameda County, California. Tally software suddenly began to malfunction during processing and began giving one candidate's votes to a different candidate in the recall election. Poll workers in Alameda County noticed something strange on election night in October. As a computer counted absentee ballots in the recall race, workers were stunned to see a big surge in support for a fringe candidate named John Burton. Concerned that their new \$12.7 million Diebold electronic voting system had developed a glitch, election officials turned to a company representative who happened to be on hand. Lucky he was there. For an unknown reason, the computerized tally program had begun to award votes for Lt. Gov. Cruz Bustamante to Burton, a socialist from Southern California. ...Alameda County officials still don't know why the computer program failed on election night. In fact, they only discovered the malfunction because they could compare the paper absentee ballots the software was counting to the computer's tally. ⁹ |

⁷ Voter turnout surprises officials. Sun News, September 12, 2002.

<http://www.myrtlebeachonline.com/mld/sunnews/news/local/4056664.htm>

⁸ New voting technology is questioned: Computer systems can be tampered with, critics say. The Kansas City Star, September 21, 2003. By Finn Bullers;

<http://www.kansascity.com/mld/kansascity/news/6621316.htm>

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| October 2003 | AccuVote OS and TS | <p>California. In a notable aberration in the 2003 California recall-election vote totals in the 17 California counties that used Diebold, several minor candidates recorded widely disproportionate vote totals.</p> <p>In Tulare County, major candidates Arnold Schwarzenegger, Cruz Bustamante and Tom McClintock each received 1.1 percent or less of their vote totals. But Randall Sprague got 38 percent of his state total in Tulare. Ronald Palmieri got 29 percent of his total in Tulare county. Jerry Kunzman got 35 percent of his total in Tulare County.</p> <p>For all Diebold-machine counties taken together, disparities for those three were even wider - a full 91 percent of Kunzman's statewide votes came in just the 17 Diebold counties out of the 56 counties around the state.</p> <p>Some researchers, including New York University Professor of Media Studies David Crispin Miller, wondered about a conspiracy, theorizing Diebold machines could have shifted votes cast for Bustamante to Kunzman, Palmieri and Sprague in order to favor Schwarzenegger.⁹</p> |
| October 2003 | GEMS | <p>Alameda County, California. A bug in the election management system caused tally errors when the election results from multiple machines were merged.</p> <p>... the cause is a problem with the GEMS 1.18.18 program.¹¹</p> <p>The only solution is to use a new version of the software, version 1.18.19, if and when it is certified.</p> |
| December 2003 | AccuVote OS and TS | <p>California. Secretary of State discovers that Diebold installed uncertified software throughout California before the recall election, without informing county officials.</p> <p>"An audit of Diebold Election Systems voting machines in California has revealed that the company installed uncertified software in all 17 counties that use its electronic voting equipment. ... Diebold admitted wrongdoing Tuesday at a meeting of the state's Voting Systems Panel."¹²</p> |

⁹ Electronic voting's hidden perils. Mercury News, February 1, 2004. By Elise Ackerman.

http://www.mercurynews.com/nld/mercurynews/news/special_packages/election2004/7849090.htm

¹⁰ [Tulare] County votes for machines. By Roger Phelps, The Porterville Recorder, June 10, 2004

http://myopr.com/articles/2004/06/10/news/local_state/news01.txt

¹¹ Report of Assurances to Alameda County, April 26, 2004. By Diebold Election Systems, Inc. Pages 5,6. http://www.truevotemid.org/ebold_rpt_alameda.pdf.

¹² E-Voting Undermined by Sloppiness. Wired News, December 17, 2003. By Kim Zetter

http://www.wired.com/news/evote/0,2645,61637,00.html?tw=wn_tophead_2

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| December 2003 | Diebold | <p>Seattle, Washington. Investigative journalist Bev Harris announced her discovery that a Diebold programmer had been convicted of stealing money by tampering with computer records.</p> <p>At least five convicted felons secured management positions at a manufacturer of electronic voting machines, according to critics demanding more stringent background checks for people responsible for voting machine software.</p> <p>Voter advocate Bev Harris alleged Tuesday that managers of a subsidiary of Diebold, one of the country's largest voting equipment vendors, included a cocaine trafficker, a man who conducted fraudulent stock transactions and a programmer jailed for falsifying computer records.</p> <p>The programmer, Jeffrey Dean, wrote and maintained proprietary code used to count hundreds of thousands of votes as senior vice president of Global Election Systems, or GES. Diebold purchased GES in January 2002.</p> <p>According to a public court document released before GES hired him, Dean served time in a Washington state correctional facility for stealing money and tampering with computer files in a scheme that "involved a high degree of sophistication and planning."¹³</p> |
| March 2004 | GEMS | <p>Maryland. In its report to assure Alameda County, Diebold announced that in the Maryland primary, they had used a version of GEMS that had not yet received federal qualification.</p> <p>As a point of information, the State of Maryland successfully utilized GEMS 1.18.19 in their March Primary Election in their 22-county roll-out of touchscreens.</p> <p>The GEMS version is expected to be federally qualified in May 2004.</p> |
| March 2004 | AccuVote TS | <p>Alameda County, California. A bug in the firmware, caught during pre-election testing, prevented votes from being cast when certain race combinations were selected using the write-in functionality. The County must use a workaround.</p> <p>To address this anomaly, the County opted to reprogram the elections database so that all races, including the crossover races, were treated as regular races.</p> <p>This subsequently required the County to manually calculate results for the two races where crossover combined results were required.¹⁴</p> |
| March, 2004 | GEMS | <p>San Diego County, California. The tabulation software switched 2,747 Democratic presidential primary votes for U.S. Sen. John Kerry to U.S. Rep. Dick Gephardt.¹⁵</p> |

¹³ Con Job at Diebold Subsidiary. Wired News. December 17, 2003. by AP. http://www.wired.com/news/evote/0,2645,61640,00.html?w=wn_tophead_3

¹⁴ Report of Assurances to Alameda County. April 26, 2004. By Diebold Election Systems, Inc. Page 2. http://www.truevotemd.org/ebold_rpt_alameda.pdf.

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
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| March 2004 | AccuVote OS | <p>Alameda County, California. A bug in the software caused the machines to count absentee ballots inaccurately. The County must use a workaround.</p> <p>The problem resided with the (unique) internal precinct ID numbers exceeding the largest number that is possible to print on the optical scan ballot.</p> <p>... The high number of the database imports inadvertently caused the precinct ID number to exceed the largest number that it is possible to print correctly on the optical scan ballot.</p> <p>... For future elections, should a required change be found late in the database proofing process, DESI [Diebold] recommends the County not re-import their election set up file into the same database and instead build a new database.¹⁵</p> |
| March 2004 | AccuVote TS | <p>San Diego County, California. Ten votes were inexplicably lost at one polling place.</p> <p>John Pilch, a retired insurance agent who worked as a polling place inspector in San Carlos, said that when polls closed at 8 p.m. Tuesday, the number of people who signed the voter log differed from the number of ballots counted by computers.</p> <p>"We lost 10 votes, and the Diebold technician who was there had no explanation," said Pilch, who registered complaints with elections officials, his county supervisor and several others. "She kept looking at the tapes."¹⁷</p> |
| March 2004 | AccuVote TS | <p>San Diego County, California. Multiple problems occurred,¹⁸ among them:</p> <p>Poll workers saw unfamiliar Windows screens, frozen screens, strange error messages and login boxes none of which they'd been trained to expect.</p> <p>A report released Monday by Diebold Election Systems shows that 186 of 763 devices known as voter-card encoders failed on election day because of hardware or software problems or both, with only a minority of problems attributable to poll worker training.</p> <p>Diebold's post-mortem of the March 2 election said it was "disappointed" in the encoder failures and that it values its ties to local elections officials. But the McKinney, Texas-based firm offered no fundamental explanation of how and why the company delivered faulty voting equipment to Alameda and San Diego counties its two largest West Coast customers on the eve of the 2004 presidential primary.</p> |

¹⁵ Diebold reports multiple problems: Registrar wants reason for e-voting. TriValley Herald. April 13, 2004. By Ian Hoffman, Staff Writer. <http://www.votersunite.org/article.asp?id=2390>

¹⁶ Report of Assurances to Alameda County. April 26, 2004. By Diebold Election Systems, Inc. Pages 2,3. http://www.truevotemd.org/ebold_rpt_alameda.pdf

¹⁷ Poll workers, voters cite tied-up hotline, poor training, confusion. Union Tribune, March 7, 2004; By Jeff McDonald and Luis Montegudo Jr. <http://www.signonsandiego.com/news/politics/20040307-9999-1n7vote.html>

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| March 2004 | AccuVote OS | <p>San Diego County, California. Out of 208,446 ballots, the machines miscounted 2,821 votes in the Democratic presidential race and the Republican U.S. Senate seat.¹⁹</p> <p>Most of the absentee miscounts occurred in the Democratic presidential race, in which 2,747 votes cast for John Kerry were incorrectly credited to Rep. Dick Gephardt. In the Senate race, in which Bill Jones won, 68 votes cast for Barry L. Hatch were credited to candidate Tim Stoen, and six votes cast for James Stewart were credited to Stoen.²⁰</p> <p>The miscounts occurred because multiple scanners simultaneously fed the absentee ballot data into the computer tabulation system. The large number of ballots and candidates on them overwhelmed the system. ...</p> <p>"These performance failures are unacceptable," [County Chief Administrative Officer Walt] Ekard wrote [to Diebold]. "Having a reliable and trouble-free voting system is absolutely essential to the county. Your failure to provide such a system in the March election was extremely troubling and any issues that remain must be fully resolved long before the November election."</p> |
| April, 2004 | AccuVote OS | <p>Uxbridge, Massachusetts. The machine failed to read 171 ballots because they were completed with the wrong kind of lead. Recount of the selectman race overturned the election. Because other candidates did not file for a recount in time, the other races cannot legally be recounted. Thus the other races remain in question.²¹</p> <p>The final decision was reached seven weeks after the election, after two hand recounts.</p> |

¹⁸ Diebold reports multiple problems: Registrar wants reason for e-voting. Tri-Valley Herald, April 13, 2004; By Ian Hoffman, Staff Writer. <http://www.votersunite.org/article.asp?id=2390>

¹⁹ New electronic scanners miscounted some county votes. NC Times April 7, 2004; By: Gig Conaughton - Staff Writer, http://www.nctimes.com/articles/2004/04/08/news/top_stories/22_27_394_7_04.txt

²⁰ Some votes miscounted in primary, officials say. Union-Tribune, April 8, 2004. By Luis Monteaquido Jr. and Helen Gao, staff writers. <http://www.signonsandiego.com/news/politics/20040408-9999-1mbvote.html>

²¹ Town slated to hold second recount. Milford Daily News, Wednesday, June 2, 2004; By Sara Withee, News Staff Writer <http://www.milforddailynews.com/localRegional/view.bg?articleid=49152>

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| April 2004 | Diebold | <p>California. Secretary of State Kevin Shelley called on the Attorney General to bring criminal charges against voting-machine-maker Diebold Election Systems for fraud.²²</p> <p>The reasons are explained in the staff report of the California Voting Systems and Procedures Panel.²³ Here are some excerpts:</p> <p>Prior to and during the hearing [of November 10, 2003], Diebold representatives either claimed to have obtained federal qualification for the TSx system or that federal approval was imminent.</p> <p>... Diebold subsequently failed to obtain federal qualification for the entire TSx system or even to pursue federal qualification of the firmware (software that is used to operate the precinct voting machines). Indeed, Diebold not only failed to obtain federal qualification for the TSx system, but failed even to pursue federal qualification of the firmware versions the VSPF authorized Diebold to install in the wake of the discovery that uncertified software had been installed.</p> <p>... Less than a month before the March Primary, after repeated assurances to the contrary, this office learned that Diebold was no longer pursuing federal ITA approval of the software and firmware installed on California voting machines. Rather, Diebold had instructed the ITA to test a newer version of both software and firmware. It also became clear that the federal ITA could not approve the newer software and firmware before the March Primary.</p> <p>Shortly before the March Primary, Diebold finally obtained from the federal ITA a very limited approval to use the TSx system installed on California voting machines, with certain "patches," on a one-time basis. Shortly before the election, Diebold engaged in a crash project to install the patches on its California voting machines. [Footnote: "In a letter dated April 14, 2004, Diebold now admits that, in its haste, it failed to install these patches on at least 34 voting machines, requiring partial recounts."]</p> <p>... In sum, Diebold:</p> <ol style="list-style-type: none"> 1. marketed and sold the TSx system before it was fully functional, and before it was federally qualified; 2. misrepresented the status of the TSx system in federal testing in order to obtain state certification; 3. failed to obtain federal qualification of the TSx system despite assurances that it would; <p style="text-align: right;"><i>continued</i></p> |

²² California Bane E-Vote Machines, Wired News, April 30, 2004. By Kim Zetter. <http://www.wired.com/news/evote/0,2645,63298,00.html>

²³ Staff Report On the Investigation of Diebold Election Systems, Inc. April 20, 2004. Presented to Secretary of State Kevin Shelley and the Voting Systems and Procedures Panel.

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|------------|---------------------|--|
| | | <ol style="list-style-type: none"> 4. failed even to pursue testing of the firmware installed on its TSx machines in California until only weeks before the election, choosing instead to pursue testing of newer firmware that was even further behind in the ITA testing process and that, in some cases, required the use of other software that also was not approved in California; 5. installed uncertified software on election machines in 17 counties; 6. sought last-minute certification of allegedly essential hardware, software and firmware that had not completed federal testing; and 7. in doing so, jeopardized the conduct of the March Primary. |
| April 2004 | AccuVote TS and TSx | <p>California. Secretary of State Kevin Shelley decertified all electronic touch-screen voting machines in the state due to security concerns, primarily caused by Diebold.</p> <p>Shelley said the ban on touch-screen machines would stay in effect unless and until specific security measures could be put in place to safeguard the November vote.</p> <p>...Additionally, Shelley declared that no county or vendor would be able to make last-minute changes to voting systems. Such changes caused problems in at least two counties in the March primary where a malfunctioning Diebold device prevented hundreds of polling places from opening on time.²⁴</p> |
| May 2004 | AccuVote OS | <p>Marblehead, Massachusetts. Machine count showed 1834 to 1836. Manual recount showed 1831 to 1830, overturning the election outcome.²⁵</p> <p>[Town Clerk Thomas] McNulty said new precinct totals would be available today. He said he was warned by the company that made the voting machines that, "When it's that close anything can happen."</p> <p>(Final decision reached three weeks after the election, after a hand recount.)</p> |

²⁴ California Bans E-Vote Machines. Wired News. April 30, 2004. By Kim Zetter. <http://www.wired.com/news/evote/0,2645,63298,00.html>

²⁵ Recount overturns result of Marblehead selection election. The Daily Item, Wednesday, June 2, 2004. By Jack Butterworth. <http://www.thedailyitemoflyn.com/news/view.bg?articleid=6313>

Diebold in the News -- A Partial List of Events

| Date | Subject | Place/Description |
|-----------|---------|--|
| July 2004 | Company | <p>Clayton County, Georgia. In violation of Georgia state law, Diebold delayed absentee voting by failing to deliver ballots to the county within the required time. The laws says:</p> <p style="padding-left: 40px;">The superintendent shall, as soon as practicable prior to each primary or election, but at least 45 days prior to any primary or general election other than a municipal primary or election, ... prepare, obtain, and deliver an adequate supply of official absentee ballots to the board of registrars or absentee ballot clerk for use in the primary or election.²⁶</p> <p>Because of redistricting, the time was shortened to 30 days, but still Diebold was late sending the ballots. On July 2, absentee voting still had not begun for the July 20 election. Diebold was supposed to deliver them on June 25; on July 1, they sent out a "partial shipment" with a promise to send the rest on July 5.</p> <p>Clayton County Board of Elections and Registration Member Bob Bolia said the ballots were supposed to be delivered June 25, then Monday and now this coming Monday.</p> <p>Other counties also experienced delays in receiving absentee ballots, but 18 days before the election, Clayton County still had not received any.</p> <p>Those who don't get their votes in "would have recourse with the county," said Cara Hodgson, a public information officer with the Georgia Secretary of State's office.</p> <p>... The delay will primarily affect overseas voters, Hodgson said. Clayton County is home to Fort Gillem, and Fort McPherson is only a few miles away, and the county has many soldiers overseas.</p> <p>Diebold spokesman, David Bear, didn't know the cause of the delay, nor the day the ballots were supposed to ship, yet he said:</p> <p style="padding-left: 40px;">"I don't think it's a matter of anyone's fault."²⁷</p> |

²⁶ Georgia Code, Chapter 21, Section 2-384, http://www.legis.state.ga.us/cgi-bin/gl_codes_detail.pl?code=21-2-384

²⁷ Delay could impact election. News-Daily.com, July 2, 2004. By Greg Geipi, <http://www.news-daily.com/articles/2004/07/02/news/news1.txt>

Diebold in the News — A Partial List of Events

| Date | Subject | Place/Description |
|------------|-------------|---|
| July, 2004 | AccuVote TS | <p>DeKalb and Chatham Counties, Georgia. In what Georgia Secretary of State Cathy Cox called "a very ordinary primary election day," voting problems ranged from incorrect summary pages ... ²⁸</p> <p>Ziyadah Sabir said she's concerned the touch-screen machine didn't properly record her vote. The summary page, which allows voters to review their choices before casting their ballots, failed to show some of her choices and showed incorrect choices for others, Sabir said. Poll workers could not fix the problem, she said.</p> <p>"That's not very reassuring," said Sabir of DeKalb County, who was voting for the first time on the machines.</p> <p>... to incorrect ballots ... ²⁹</p> <p>Voting problems seemed widespread enough in Tuesday's primary election to prompt the two candidates in the District 1 Chatham County Commission race to pledge a challenge if the vote were close.</p> <p>Colin McRae said he asked for the Democratic ballot because he wanted to be sure to vote in the 12th Congressional District race. He double-checked with the poll worker, asking if the computer card really activated the Democratic slate.</p> <p>When the poll worker said it did, he put the card in the machine. But it only showed the nonpartisan judicial candidates.</p> <p>The poll workers called a technician and held up the line until the problem was solved - 45 minutes later.</p> <p>... to lost ballots.</p> <p>Craig Kidd of Buckhead said he voted last week as part of the state's advance voting program, which allows people to cast ballots during a five-day period before an election.</p> <p>Kidd said on Tuesday he went to his precinct to make sure his vote had been recorded. Poll workers said they had no record of his vote and advised him to cast another ballot, Kidd said.</p> <p>"I find that a little distressing," said Kidd. "I like the concept of advance voting, but if this is a common thing, you could have hundreds or thousands of people who think they voted but they actually haven't."</p> |

²⁸ Few snags seen at polls: Technical problems small, but unsettling, Atlanta Journal Constitution, July 20, 2004. By Carlos Campos. <http://www.ajc.com/news/content/news/election/0704georgia/21voting.html>

²⁹ Problems plague primary: From incorrect addresses to improper instructions and confusing ballots, many found it difficult to cast their ballots Tuesday. Savannah Morning News, July 21, 2004. By Bret Bell. <http://www.savannahnow.com/stories/072004/2315676.shtml>

Diebold in the News -- A Partial List of Events

| Date | Subject | Place/Description |
|------------|-------------|--|
| July, 2004 | AccuVote TS | <p>DeKalb County, Georgia. Over 150 Georgia citizens volunteered as poll watchers in the primary. They observed machine malfunctions and irregularities. Excerpts from one observer's report.³⁰</p> <p>When the polls opened ...</p> <p>We had a poll watcher in every precinct, informed and trained with the things to look for and how to address the problems the moment they cropped up. We insured the law was followed to the letter.</p> <p>The calls from the poll watchers began promptly at 7:00 AM with every irregularity, improper behavior and machine malfunction they saw reported to the attorneys.</p> <p>One precinct reported almost upon opening of the polls that all machines (10) were failing. Voters inserted the access card and the card was immediately ejected. The pollwatcher reported that voters were offered provisional paper ballots, but they were prepared with only 25 of these ballots and ran out within 10 minutes. It took almost 2 hours to rectify the situation even though our HQ personnel reported it to the County office immediately.</p> <p>When the machines overheated at the polls ...</p> <p>At 4:15 we received a call from one of the precincts. The poll manager had announced to the pollworkers that all the DREs were malfunctioning because the polling place was unairconditioned and unventilated.</p> <p>We arrived at the polling place and asked to speak to the Poll Manager who explained that they were experiencing some problems but they had a technician on the way. Our Pollwatcher had asked the technician to note the problems on his forms. He signed his name, wrote in the time (1:00 PM) and noted "All machines running hot."</p> <p>We spoke with the technician and he explained that the machines were behaving erratically. Because of the heat, when a voter placed their hand on the touchscreen, their chosen candidate would change (the red X would jump all over the screen) and voters would have great difficulty casting their vote for the candidate of their choosing. He informed us the problem began occurring at 12:15 and was getting progressively worse as the environment in the polling place was heating up with the daytime heating. Voting continued on the overheated machines until the polls closed at 7:00 PM.</p> <p>Talking to the Elections Director ...</p> <p>One of the questions we asked involved the 13 overheating machines and she repeated the "human failure" response saying it was the humans who overheated and overreacted. She went on to explain that the Diebold DREs were "certified to operate to 200 degrees" and the humans weren't.</p> |

³⁰ Wish us luck! Poll Watching in Georgia. National Ballot Integrity Project Discussion Forum. Posts by Roxanne Jekot. July 20-22, 2004.

http://www.ballotintegrity.org/cgi-bin/dcforum/dcboard.cgi?az=show_thread&com=61&forum=DCForumID1&comm=0&viewmode=threaded

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
|-----------|-------------|--|
| July 2004 | AccuVote TS | <p>Fulton County, Georgia. A procedural error in advance voting revealed that Georgia citizens' Constitutional³¹ right to ballot secrecy is violated when they voting early on the touch screens.³²</p> <p>Craig Kidd cast a ballot ahead of the July 20 Republican primary during the five-day period for advance voting. A designated Republican poll watcher and campaign worker for a GOP state Senate candidate, Kidd showed up at his Buckhead polling place on Election Day to make sure his advance vote had been recorded. Kidd claims a poll worker told him there was no record of his vote and advised him to vote again to be sure his vote would be tallied.</p> <p>Later in the day, Kidd contacted The Atlanta Journal-Constitution to tell a reporter he was alarmed that he was allowed to cast two ballots. Kidd said he was concerned that the ballots of some early voters would not be counted or that some people could vote twice.</p> <p>... Fulton election officials have acknowledged that a breakdown in procedures allowed Kidd to vote twice. When a voter casts an early ballot, a notation of that vote should be made on a master voter registration list that is later sent to precincts prior to Election Day. Poll workers then will cross the advance voters off the list of people eligible to vote at their polling place.</p> <p>... Fulton officials later disqualified Kidd's early vote, which has a unique identifying number allowing election officials to know who cast it.</p> |
| July 2004 | AccuVote TS | <p>Georgia. Touch screen voting machines reported U.S. Senate votes from only six out of seven Democratic voters. While the machines reported 14.5% Democratic undervotes for U.S. Senate, they reported only 3.2% Republican undervotes.³³</p> <p>In the next few days, Secretary of State Cathy Cox will release numbers showing that on July 20 voters requested more Democratic ballots (731,111) than Republican ones (671,961). The numbers are based on ballot counts slowly being assembled from the 159 counties.</p> <p>... On the Democratic side of the U.S. Senate race, 625,115 votes were cast. That means nearly 106,000 Democrats – 14 percent of the total – took a look at the eight-candidate field. And passed.</p> |

³¹ Constitution of Georgia, Article II, Section I, Paragraph I. <http://www.cviog.uga.edu/Projects/gainfo/conar2.htm>

³² Officials urged to follow rules to prevent any double-voting. The Atlanta Journal-Constitution, October 24, 2004. By Carlos Campos. <http://www.ajc.com/news/content/news/election/1004georgia/25votetwice.html>

³³ So Democrats ran No. 1 after all. But one in six voters couldn't take the U.S. Senate candidates seriously. Atlanta Journal-Constitution, October 27, 2004. By Tom Baxter and Jim Galloway. <http://www.ajc.com/metro/content/metro/insider/index.html>

Percentages are based on total ballots reported in the above article and total votes reported on the Georgia elections results site for Democrats (http://www.sos.state.ga.us/elections/election_results/2004_0720/0000110.htm) and Republicans (http://www.sos.state.ga.us/elections/election_results/2004_0720/0000120.htm)

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
|------------|----------------------------|---|
| July, 2004 | AccuVote OS AccuVote TS | <p>Putnam County, Georgia.³⁴ The optical scanner failed to read nine ballots.</p> <p>For Tuesday's election, the absentee and early voter ballots were counted through the optical scan system the county has used for its past elections. This also delayed vote counting because there were nine ballots that the optical reading machine could not read.</p> <p>These had to be read and certified by an official ballot divining board made up of one Republican, one Democrat and one non-partisan.</p> <p>Several precincts had trouble getting the touch-screen votes accumulated onto one machine. In one precinct, the accumulation problem was never resolved.</p> <p>"There were a couple of precincts that had problems with what they call 'accumulating,'" Howard said [Pat Howard, Putnam County probate judge and election superintendent]. "But all of them worked through it, but one."</p> <p>Howard said each machine is closed out by a poll worker at the end of voting, then a paper readout of the number of votes is printed. These numbers are checked against the number of voters who used the machine.</p> <p>Then, she said the PC cards, which look like a large version of a memory card from a Sony PlayStation, are taken out of each machine and inserted into one machine. All the votes are then accumulated in that one machine and transferred to the courthouse to be accumulated with the votes from other precincts.</p> <p>At precinct 4C, there was a problem with this process and eventually all the PC cards had to be taken to the courthouse and accumulated there. This delayed the tallying on non-absentee votes until 10 p.m.</p> |
| Aug. 2004 | Diebold printery | <p>Clayton County, Georgia. A month after delaying absentee voting in the July primary, Diebold delays the August run-off election by failing to deliver the printed ballots in time.</p> <p>Clayton County officials are still waiting for the ballots to come from the printers, but hope to open early voting today for the Aug. 10 primary run-off.³⁵</p> |

³⁴ Putnam County voting officials report few glitches on election night. The Union-Recorder. By Merritt Melancon. July 22, 2004. <http://www.unionrecorder.com/articles/2004/07/22/news/news04.bt>

³⁵ Early, absentee voting opens for runoff. News-Daily. August 2, 2004. By Bob Paslay and Ed Brock <http://www.news-daily.com/articles/2004/08/02/news/news1.bt>

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
|----------------|-------------|--|
| September 2004 | Company | <p>California. Attorney General Bill Lockyer dropped the state's criminal investigation of Diebold and joined with Alameda County and two voting integrity activists, Bev Harris and Jim March, suing the company in a False Claims Act. ³⁶</p> <p>Their False Claims Act suit, filed under seal and in the name of state and local taxpayers, alleged that Diebold sold a nearly \$13 million touch-screen system to Alameda County by misrepresenting its accuracy, security and government approval. As state and county attorneys weighed the case, state and local elections officials found that Diebold had installed unapproved software in Alameda County's touch-screens, that its system was vulnerable to hacking and that its central vote-tabulating program gave thousands of absentee votes to the wrong candidates.</p> <p>"We received assurances when they sold a voting system to us, and those assurances have not been met," said Alameda County Counsel Richard Winnie.</p> <p>Secretary of State Kevin Shelley blasted Diebold for what he called a "culture of deceit" and referred the company to the state attorney general for criminal investigation.</p> <p>Lowell Finley, an Oakland-based elections lawyer who filed the original suit on behalf of Harris and March, said his clients will watch to ensure the state and county to pursue the case with vigor.</p> <p>"Now that the state's attorney general has waded into this controversial issue, it is going to be important for him and the people of the state that he delivers something substantial, either in terms of a verdict or a very favorable settlement for California taxpayers," Finley said. "I don't think he would have made the decision to intervene if he didn't think that was possible."</p> |
| September 2004 | Accuvote TS | <p>Rockville, Maryland. The sensitive touch screen registered U.S. Senator Mikulski's vote incorrectly during a demonstration at a local festival. ³⁷</p> <p>Mikulski got a firsthand look at possible voting mistakes when she tried out an AccuVote TS touch screen machine Sunday at a folk festival in Takoma Park. But as Mikulski voted on a mock referendum question, her hand inadvertently grazed the screen and cast a "yes" vote for another mock question, according to Morrill, who stood next to her as she tested the machine.</p> <p>Mikulski, who had planned to vote "no" on the question, tried to push the "no" button to change her vote, but the machine didn't make the change. She eventually was able to correct the ballot.</p> <p>[Mikulski's aide Michael Morrill] said ... the example reinforces her belief that a voter moving quickly through a ballot could inadvertently cast the wrong vote.</p> |

³⁶ State joins lawsuit against Diebold. Tri-Valley Herald, September 8, 2004. By Ian Hoffman, Staff Writer.
<http://www.trivalleyherald.com/Stories/0,1413,86~10671~2387400,00.html>

³⁷ Senator backs voting machine bill after firsthand experience with glitch. SFGate, September 13, 2004. By Stephen Manning.
<http://www.sfgate.com/cgi-bin/article.cgi?f=/news/archive/2004/09/13/politics1858EDT0674.DTL>

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
|----------------|-------------|---|
| September 2004 | Accuvote TS | <p>Rockville, Maryland. The Montgomery County election board allowed Stan Boyd, a local election judge, to use a Diebold Accuvote TS for demo purposes at a Rockville festival. But after the machine registered Senator Barbara Mikulski's vote inaccurately, Mr. Boyd decided to keep the machine long enough to have an expert test the machine to diagnose the problem. County officials have filed a court order to force Mr. Boyd to return the machine.³⁸</p> <p>Boyd, a 63-year-old retired high school teacher from White Oak, said he wasn't trying to hold the machine hostage. He said his purpose was to search out any problems with the voting system that Maryland residents will use in the upcoming election.</p> <p>"The whole purpose is to find out what things can be fixed – and before the elections – so they are trustworthy," he said after the hearing. ...</p> <p>After news reports Monday of Mikulski's problem, Boyd said county elections officials contacted him and he agreed to return the machine that day. But after CBS asked him if it could test the machine, he told the county he planned to keep the machine until Thursday, as originally planned.</p> <p>County officials said they then contacted Boyd at least nine times by phone in an effort to get him to return the machine; Boyd said they even showed up at his house.</p> |

³⁸ **Board seeks to force return of voting machine.** Baltimore Sun. September 14, 2004. By Stephen Manning. <http://www.balTIMOREsun.com/news/elections/bal-voting0914.1.4731302.story?coll=bal-local-headlines>

Diebold in the News -- A Partial List of Events

| Date | Subject | Place/Description |
|----------------|-------------|--|
| September 2004 | Accuvote OS | <p>King County, Washington. Although the optical scan software revisions intended to handle a new style of ballot were not qualified by an ITA, the state assigned provisional certification to the software after completing what the Secretary of State's office claimed was "extensive" testing. For example, in a letter to VotersUnite!, State Director of Elections Nick Handy defended the state testing process by stating that it included:</p> <p style="padding-left: 40px;">Functional tests of each system to ensure that the variety of ways that a voter might mark a primary consolidated ballot will be counted in accordance with the new Washington State law.</p> <p>However, the functional tests didn't catch a major software design error that caused the machines to reject valid ballots. Ballots without a party choice selected were rejected by the precinct-optical scanners, even if the voter intended not to vote in partisan races.³⁹</p> <p>Among the disgruntled in King County was attorney Rhys Sterling, who learned the ballot box wouldn't accept his ballot because he voted only on nonpartisan races and issues.</p> <p>After the machine returned his ballot, a poll supervisor at Hobart Community Church asked whether he had chosen a political party (he had not) and whether he had deliberately not chosen a party. His ballot was accepted only after the supervisor opened the machine and pressed a button overriding its programming.</p> <p>"So much for secret ballots," said Sterling, who claims that yesterday's voting procedures violate the state constitution's guarantee of "absolute secrecy" in preparing and depositing ballots.</p> <p>The problems could easily have been avoided if the revised software had been adequately designed. It simply had to accept nonpartisan ballots and reject ballots with votes in party races but no party choice marked.</p> |

³⁹ Nonpartisan voters baffle ballot machines. Seattle Times, September 15, 2004. By Keith Ervin, Seattle Times staff reporter. http://seattletimes.nwsources.com/html/localnews/2002036002_primary15m.html

Diebold in the News -- A Partial List of Events

| Date | Subject | Place/Description |
|----------------|------------------------|--|
| September 2004 | AccuVote TS and modems | <p>Prince George County, Maryland. The modem at the central facility malfunctioned, and voters in one precinct weren't able to vote the Democratic ticket on the paperless machines, so they wrote their choices on pieces of paper. ⁴⁰</p> <p>The Board of Elections had technical difficulties last night compiling results. Election workers said the main modem to receive results from the polls had malfunctioned.</p> <p>Election officials said there were no major problems at polls throughout the day.</p> <p>The only known glitch was at Mount Rainier Elementary School. When polls opened yesterday, nearly a dozen voters were told the machines were not pulling up the Democratic slate.</p> <p>Linda Couch, a Mount Rainier resident, said poll workers told the voters that because the machines weren't operating properly, they could write down their choice on a piece of paper. Couch said some voters left, saying they would try to come back. Others, like her, wrote their selections down on the paper.</p> |

⁴⁰ Johnson Aide Wins Democratic Primary, Washington Post, September 15, 2004. By Ovetia Wiggins, staff writer. <http://www.washingtonpost.com/wp-dyn/articles/A22014-2004Sep14.html>

Diebold in the News — A Partial List of Events

| Date | Subject | Place/Description |
|---------------|-------------|---|
| November 2004 | AccuVote TS | <p>Maryland. On election day, TrueVoteMD registered 363 reports involving 531 incidents of problems encountered by voters. Many voters reported votes switching on the screens.⁴¹</p> <p>These problems ranged in severity from moderate inconvenience to outright voter disenfranchisement. The significance of these complaints increases dramatically, however, when one considers that Maryland had a total of 1,787 precincts this year, and TrueVoteMD was only able to cover a fraction of these—some 6%. ...</p> <p>Most incidents that were reported to TrueVoteMD fell into the following categories:</p> <ul style="list-style-type: none"> ♦ Lost votes due to incomplete ballots that were missing candidates or entire races ♦ Lost votes due to machines crashing or freezing before the voter cast a ballot ♦ Lost votes due to “smart card” and encoder failures ♦ Lost votes due to delayed poll openings because of machine boot-up failures ♦ Lost votes due to voter abandonment because of unacceptably long waits ♦ Lost votes resulting from touch screen failures that included vote switching, review screen malfunctions, unintended selections and submission of ballots before voters had made selections, hypersensitivity to touch that caused voters to complain that “it was out of control and I have no idea who my votes were cast for,” screens going blank ♦ Lost votes from unreadable voting machine hard drives (PCMCI A cards) ♦ Lack of privacy because machines were oriented so that the screens were visible by those waiting on line to vote ♦ Discrepancies between electronic vote tallies and manual vote tallies ♦ No offer of provisional ballot or wrongful denial of provisional ballot ♦ Disenfranchised voters due to failures in the Motor Vehicle Administration registration process. ♦ Inadequate staffing and insufficient training of election judges |

⁴¹ When the Right to Vote Goes Wrong, TrueVoteMD, November, 2004. http://www.truevotemd.org/Election_Report.pdf

Diebold in the News – A Partial List of Events

| Date | Subject | Place/Description |
|------------|----------|--|
| March 2005 | AccuVote | <p>Montgomery County, Maryland. The IT report to the County Elections Board reveals widespread problems with the electronic voting machines on election day. Here are some excerpts:⁴²</p> <p style="text-align: center;">Information Technology – Election Day Review</p> <p style="text-align: center;">Election Day Equipment Review</p> <p>For Election Day, 2,597 voting units were deployed. An additional 80 voting units were sent to about 65 polling places on Election Day to replace malfunctioning units. A few were sent out to accommodate long lines at polling places.</p> <p>From Help Desk tickets and GEMS reports, 189 voting units (7%) of units deployed failed on Election Day. An additional 122 voting units (or 5%) were suspect based on number of votes captured.</p> <p>Of the 189 voting units that failed:</p> <ol style="list-style-type: none"> 1. On Election morning, 58 voting units failed to boot up, showing a Ballot Exception Error. These units were unusable and were immediately taken out of service. No votes were captured on these units. 2. 106 voting units experienced screen freezes. In staff opinion this is the most serious of errors. Election judges and technical staff reported that many of these units froze when the voter pressed the Cast Ballot button. This leads to great confusion for judges and voters. The voter leaves the polling place with little or no confidence that their vote was counted. In many cases, the election judges are unable to provide substantial confirmation that the vote was, in fact, counted. 3. 25 voting units failed due to a variety of problems including card readers, printers, and power problems. 4. The additional 122 suspect voting units were identified because few votes were captured compared to other units in the same polling place. A unit was considered suspect if it had 25-50 votes captured when all other units in the polling place had over 150 votes. 5. Of the 1,245 encoders deployed, approximately 30 failed and were replaced on Election Day. Preliminary tests indicate that the failures are a result of little or no battery power. 6. Prior election day, we prepared approximately 95 voting units using new touch screen units and new PC memory cards. Of these, 5 failed; 4 with screen freezes and 1 with a ballot exception error. Another 4 units were in the suspect category. <p>As of February 16, 2005, Diebold in Maryland was unable to diagnose the problems and was shipping the systems out of state for testing.⁴³</p> |

⁴² IT Report to the Montgomery County Election Board. Page 11. http://www.truevotemid.org/Resources/Lessons_Learned.pdf

⁴³ Diebold Memo. <http://www.truevotemid.org/Resources/DieboldMemo2-16-05.jpg>

Confusion of Myth and Fact in Maryland

July 19, 2004

Part of the Voting and Elections web pages

by Douglas W. Jones

THE UNIVERSITY OF IOWA Department of Computer Science

In late June or early July of 2004, the Maryland State Board of Elections issued a brochure, *Maryland's Better Way to Vote -- Electronic Voting: Myth vs. Fact* listing 6 "myths" about electronic voting and offering "facts" in response to each "myth." This brochure was intended to counter widespread public criticism of the voting system in use in Maryland. Clearly, skepticism about the voting system does threaten public trust in that system, and public trust in the voting system is essential if the government is to be seen as legitimate in the eyes of the electorate, so some kind of defense is appropriate.

Sadly, Maryland's *Myth versus Fact* defense contains a sufficient number of misleading assertions, straw-man arguments and outright errors that it may well do more to fuel public distrust than it does to assure the trustworthiness of the system it defends. In sum, many of the statements in this brochure would be more nearly accurate if the labels *myth* and *fact* were exchanged. A more appropriate defense might have involved squarely admitting the defects in the current system and clearly documenting, for each, the actions taken by the Board of Elections to deal with the problem.

The text of the Maryland brochure is reproduced in the following. Added comments detail errors in the presentation of "myth" and "fact", presenting evidence and suggesting alternative defensive measures:

Maryland's Better Way to Vote

Electronic Voting: Myth vs. Fact

Maryland State Board of Elections
151 West Street, Suite 200
P.O. Box 6486
Annapolis, MD 21401
www.elections.state.md.us

*Myth 1**"Electronic voting systems are inherently insecure and vulnerable to fraud."***FACTS**

- Maryland's new Direct Recording Electronic (DRE) voting system has been studied and analyzed more than any other voting system in the country.

This is true. Following the release of the Hopkins Report, Maryland commissioned reports by SAIC and RABA Technologies. In addition Ohio commissioned reports by InfoSentry and Compuware. These studies complement each other, and all of them have found serious security flaws in Maryland's voting system. Sadly, each of these studies appears to have found at least one flaw missed by the others, and this, in turn, suggests that additional flaws may remain to be identified.

Unfortunately, only 69 pages of the 200 page report by SAIC have been released to the public. The remaining pages were wholly redacted and many of the released pages were partly redacted by the State of Maryland. It seems fair to ask, why has Maryland not released the whole report? The contents of this report are of national importance, since this voting system is widely used outside Maryland. If the problems described in the redactions have been resolved, the state should release the whole report. If the problems have not been resolved, it is even more important for us to know this.

- Not one of the security analyses conducted on Maryland's voting system showed evidence of fraud or manipulation or the ability to manipulate the voting system in a polling place, considering the procedural and human safeguards that surround an election.

The analyses were not looking for evidence of manipulation, they were looking for vulnerabilities, so the first claim above is a red herring.

The analyses did find numerous vulnerabilities, many of which involved the possibility of insider fraud or errors in carrying out these procedural safeguards. It is worth noting that the history of election fraud in the United States includes many instances of collusion between crooked politicians and election administrators! Furthermore, the SAIC study found serious flaws in Maryland's procedures.

Also note the use of the clause "in a polling place," because many of the vulnerabilities found were not at the polling place, but in the pathway from the polling place to the final canvass.

- The changes made as a result of the analyses improve the security of the voting system and further diminish the likelihood of fraud.

This is true, and the states of Maryland and Ohio are both to be congratulated for contracting to have several of these analyses done.

- Additionally, as noted in a recent U.S. Congressional Research Report, "there are no proven cases of tampering with the Direct Recording Electronic (DRE) or other computer-assisted voting systems in public elections."

This is true, the report cited was by Eric. A. Fisher.

Note, however, that "no proven cases" yet does not imply that there will never be such cases. A smart crook is unlikely to attack a controversial new technology; instead, such a crook is far more likely to attack a widely accepted but vulnerable technology. Statewide acceptance of DRE voting systems makes them more tempting targets, but only after they have been in use for a few years should we expect crooks to begin to exploit their weaknesses.

Myth 1 has not been rebutted by the facts presented, and it is almost certainly true, not merely a myth, since it is fair to state that all voting systems are inherently vulnerable to fraud, regardless of their technological foundation. What we seek, then, are voting systems that are less vulnerable than their competitors. Data presented in the Compuware Report suggests that the Diebold system, used in the State of Maryland, was the most vulnerable of the four DRE systems examined. Many people have argued that hybrid technologies such as machine-counted paper ballots with precinct-count scanners offer significantly more security than DRE systems.

Myth 2

"The voting systems do not accurately record and tabulate the votes cast."

FACTS

- All of the analyses of Maryland's voting system confirmed that the system counts and tabulates votes with 100% accuracy.

Strictly speaking, no analysis of a computerized system can confirm its accuracy, so when such a statement is made, it must be taken as hyperbole. In general, the most that can be confirmed by

analysis of a computer system is that, so far, it has not failed. In many cases, given sufficient safeguards, this is sufficient to allow us to use the system.

Indeed, barring the as-yet-to-be-detected fraud, and barring a variety of procedural and programming errors that have been made in various jurisdictions, DRE systems have proven to be quite good at counting the votes that they have successfully captured from voters.

On the other hand, DRE systems have an established record of confusing a significant but small fraction of the electorate, on the order of 1%, into casting votes that do not reflect their intent. This appears to be the result of badly designed screen layouts and can certainly be corrected. Research in this area is ongoing (notably by Ben Bederson at the University of Maryland).

In Maryland, TrueVoteMD.org has found five cases, in different races in different parts of the state, where witnesses assert that DRE machines failed to present the entire ballot. The argument that the machine counts every vote cast does not address the issue posed when a voting machine fails to allow a voter to cast a vote in some particular race.

There have been examples of electronic mis-tabulation of votes. Some attributed to running machines with low batteries, some to accumulating too many votes on a machine, and some to random events such as cosmic rays flipping single bits of memory. See [Electronic Miscounts and Malfunctions In Recent Elections](#) for more details.

- An independent testing authority tests the source code, a human-readable program written by a programmer, to ensure that the software accurately tabulates votes with 100% accuracy.

The report of the independent testing authority, or ITA is confidential, shared only with the vendor and select state officials, and the ITA is paid by the vendor and usually has a close working relationship with the vendor.

Programs, while nominally human-readable, are notoriously hard to read. The fact that one or two programmers at the ITA read the code offers very little assurance that the code is correct, although it is certainly better than having no outsiders read the code. The fact that the examiners at the ITAs have found many errors and forced the vendors to correct them does not, however, offer any guarantees that no errors remain to be found!

There have been numerous significant errors in voting systems that have escaped detection by ITAs, including major security flaws that first came to widespread public attention because of the Hopkins Report, and have been confirmed by the other independent reports commissioned by the states of Maryland and Ohio.

- Election officials and an independent verification firm thoroughly test each unit.

Genuinely thorough testing of any computerized system is impossible. The reason is simple: There are an infinite number of possible sequences of events the computer could respond to, and we can only afford to test a finite number of these. As a result, while testing can detect errors, testing can never certify that a computer system is error free.

A few machines of each new make and model of voting machine are tested extensively by an independent testing authority (ITA) prior to presentation to the state. This is the most thorough testing voting machines ever get, and yet, we know that flaws go undetected through these tests. The state tests a few machines during state qualification, but state testing is rarely as thorough as the ITA tests, and some states contract this testing to the ITA itself.

Every one of the thousands of voting machines delivered undergoes a very perfunctory acceptance test -- when you are receiving machines by the thousand, you cannot spend hours testing each of them! Finally, before every election, a brief pre-election test is applied to each machine. Pre-election testing for the Diebold Accuvote system used in Maryland is described in Subsection 33.10.02.15 of the Code of Maryland Regulations. This allows the use of an automated pre-election test where the machine and the canvassing system are put through self-tests that involve processing scripted test data. Such tests give some assurance that the machine is functional as intended by the programmers, but they give no assurance that the software is honest. Given the number of machines that must be tested, what we want from this pre-election test is an assurance that the machine is set up for the correct election, that the batteries and plug-in power supply are good, that the touch screen works, and that the correct software and ballot information are loaded.

Maryland also requires a public demonstration pre-election test. Subsection 33.10.02.16 of the Code of Maryland Regulations says little about the substance of this test, but focuses instead on who may observe and who must be notified in advance of this test. This test should clearly include a demonstration of the minimal testing mandated by the previous section of the regulations, but a responsible jurisdiction ought to use this opportunity to select a few voting machines at random for much more intensive pre-election tests, voting hundreds of test ballots and doing so using real touches to the screen by human fingers instead of automated test scripts. Such a test can be comparable in intensity to those used by many states for qualification, but unfortunately, the cost of such testing is high enough that it is unreasonable to expect that every voting machine used will see such tests.

Neither Maryland law nor regulations appear to mention any use of parallel testing, that is, testing of randomly selected voting machines on election day during the election itself. Many opponents of voter-verified paper ballots say that such ballots are unnecessary because parallel testing can be used to achieve the same goal. For example, the League of Women Voters' Questions and Answers on Direct Recording Electronic (DRE) Voting Systems (available from Maryland's web site) strongly advocates this, as does the Leadership Conference on Civil Rights. It is noteworthy that the state of California has used parallel testing in the spring 2004 presidential primary.

The weakness of pre-election testing of all forms is that dishonest software could be written to detect that testing is under way so that it behaves honestly when under test and only cheats during real elections. For example, such software could examine voting patterns, the date, how long it has been turned on, or any of many other variables to distinguish between real elections and testing. Parallel testing addresses this possibility by testing randomly selected machines during the election, with test ballots cast in a manner that is as nearly indistinguishable from real ballots as is possible. Ideally, the machine to be tested is selected at the last moment, so that there is no opportunity to fix the software to behave specially.

Parallel testing is not perfect. It cannot detect fraudulent software that is enabled by a specific action by a voter or polling place official who is part of the conspiracy, and it has a low likelihood of detecting fraudulent software if only a few machines, at random, behave fraudulently, but it does defend against a wide range of potential threats. It is therefore reasonable to ask why so few states are using parallel testing for their DRE voting systems!

It is important that technically knowledgeable observers be invited to observe all tests and that they be invited to ask questions about the tests. Testing in private, behind closed doors, as it is currently done at the ITAs, offers very little on which to base public confidence. Subsection 33.10.02.16 of the Code of Maryland Regulations does require that the nature of the pre-election demonstration be described to the observers, but it appears to give no right to observe the routine pre-election tests.

Myth 2 is well supported by the facts. DRE voting systems have misrecorded votes, and DRE voting systems have mistabulated votes. Furthermore, the "facts" presented by Maryland to contradict *Myth 2* misrepresent what is possible in the domain of inspection and testing of computerized systems.

Myth 3

"A single person could cast multiple votes."

FACTS

- A voter must have an access card specifically activated for a voting unit in the polling place. Only election judges can activate voter access cards. After a voter casts a ballot, the access card cannot be used again until an election judge reactivates the card.

This correctly describes the intent of the Diebold AccuVote TS architecture. Ideally, only election judges should be able to activate voter access cards, but the *red-team exercise* conducted by RABA Technologies, for the state of Maryland, included the design (but not construction) of a pocket-sized device that would allow a voter to forge voter access cards. They built one using a laptop computer and demonstrated that this worked.

- a combination of physical security (and visual oversight of the voting process at the precinct), software, and system features would make casting multiple votes extremely difficult and highly unlikely.

This is true. So long as the required polling place procedures are actually followed, the risks posed

by this weakness in the voting system may be acceptable. Election observers should familiarize themselves with Title 10, Subtitle 3 of Maryland Election Law and with the appropriate section of Subtitle 33.10 of the Code of Maryland Regulations (depending on the voting system being used) in order to assure that the required procedures are indeed being followed. Unfortunately, the Maryland Regulations leave most of the details to the *Judge's Manual* provided to each county by the state election administrator under Regulation 33.10.03.01. Unfortunately, these manuals do not appear to be readily available.

- Throughout the day, election judges reconcile the number of voters who have checked in at the polling place against the number of votes recorded on each voting unit. Any discrepancy would be identified immediately.

This will be true if the required polling place procedures are actually followed. It is noteworthy that this reconciliation requirement is not immediately evident in either Maryland Election Law or the Code of Maryland Regulations. It must therefore be in the *Judge's Manual* provided to each county.

- It is a felony to cast multiple votes and is punishable by fines and imprisonment.

This is true, but unfortunately, there is a long history of violations of these laws. For example, Linda Lamone said that Maryland and the District of Columbia recently compared their voter databases and found 12 voters that had voted in both jurisdictions. When this was reported to the FBI, there were, apparently, no prosecutions!

Myth 3 focuses on what has been called *retail vote fraud*, in which individual dishonest voters attempt to cheat. Such retail fraud is a serious problem in some regions of the country, although the small number of cases found in the recent Maryland-DC comparison suggests that the magnitude of this problem may be overestimated by many. The big threat posed by DRE voting systems has always been *wholesale fraud*, in which dishonest election officials or other insiders with access to the machinery deliver votes, not one by one, but in bulk quantity, as in the bad old days when Chicago's dead were reputed to be regular voters.

Myth 4

"Paper receipts solve the concerns regarding electronic voting system fraud."

FACTS

- Maryland only uses a voting system that meets all voting system standards established by the federal government.

This oversimplifies the story. The law cited is Maryland Election Law, 9-102. Certification of Voting Systems, Section (2). As is the case in most states, however, not all parts of Maryland's current voting system are certified to the FEC/NASED 2002 Voting System Standards; some parts are only certified to the older 1990 Standards. It takes time for vendors to bring their products into conformance with new standards, and there is a delay after that while the new equipment is tested. It is therefore somewhat unrealistic to expect, two years after the new standard was adopted, that all voting systems will have been updated to conform to the new standard.

- Until standards for printers are established and voting systems are tested and certified against these standards, it would be irresponsible to attach a printer to a voting system and would violate Maryland's election law.

This bends the truth. As of July 7, 2002, the Avante Vote Trakker voting machine was certified to the 1990 FEC Voting System Standards; this machine offers a voter-verified paper trail. Others machines offering voter-verified paper trails have since been certified to these old standards, and two, one from Avante and one from Sequoia, have been certified to the newer 2002 standards. A relatively up-to-date list of certified voting systems is available from the National Association of State Election Directors; this lists, for each system, the standard to which it was certified.

It is true, however, that there are no standards in place that address the specific issues raised by the addition of a paper trail to a touch-screen voting system. The state of California has proposed a draft standard to address this lack. The state of Maryland, however, has taken little or no interest in encouraging the development of such a standard.

It is also noteworthy that Maryland Election Law, 9-102. Certification of Voting Systems, Subsection (3d) item 9 deems it a positive virtue for a voting system to offer an alternative means of verifying the tabulation. The Diebold system currently in use in Maryland offers very weak assurances in this regard, since the electronic records of the votes are all created by the same software, and no recount of some version of these records can correct for errors introduced by this software.

- Paper receipts provide a false sense of security because they do not guarantee that the results recorded in the machines are the same results printed on the receipt.

Advocates of paper generally do not refer to the pieces printed by the voting machine as *receipts*.

Rather, they refer to them as *voter-verified paper ballots*. A receipt is something you take from the polling place as proof of your vote, while a ballot is something you leave behind, in a secure ballot box.

It is true that merely printing a paper ballot does not answer all of the security questions. This is why many advocates of voter-verified paper ballots prefer that the paper itself be counted -- for example, by precinct-based ballot tabulating machines, instead of allowing the possibility that the voting machine would record the vote one way while it prints something else on the paper.

Alternatively, many advocates of voter-verified paper ballots recommend routine hand reconciliation of the paper record against the electronic record. The California Election Code sets a model for this: After each election, Section 15360 mandates that precincts representing at least one percent of the vote be selected at random in each jurisdiction for such an audit in order to check the accuracy of the vote tabulating equipment.

Myth 4, therefore, is best characterized as a straw-man argument, an easily refuted statement that misrepresents the position taken by the opponents of DRE voting systems. Sadly, some of the "facts" presented are not entirely true.

Myth 5

"Hackers could alter a voting system by introducing a 'Trojan Horse' or breaking into the election management system."

FACTS

- A person must have physical access to the source code in order to plant a "Trojan horse" (i.e., hidden program or utility that can cause harm). Election offices do not receive source code and only receive "application" software (i.e., computer-readable program).

This is true but a bit garbled, and this only applies to Trojan horses, not other serious threats. A better definition of a Trojan horse is that it is something offered (or sold) as having one function, for example, as a beautiful sculpture, but that actually serves another function, for example, to carry invading soldiers into town. Trojan horse attacks in software must therefore come from the software developers, not from hackers.

Other forms of attack such as virus-based and worm-based attacks are more interesting threats for a hacker to exploit, and we are interested in defense not only against hackers, but against insiders, for example, programmers working for the voting system vendor, the independent testing authority or the state election office.

The form of delivery of the software is not really relevant to questions about Trojan horse attacks or attacks through worms or viruses. Delivery of easily edited source code to the local election

office would allow local election officials to easily change the software, opening the door to locally administered wholesale fraud, but this is not at all the same as an attack by an outside hacker. It is worthwhile to note that many successful hacker attacks have been made on systems where there was no access to source code.

The computer industry has a long record of releasing products that contain unauthorized features that were inserted by programmers at the vendor without the authorization or approval of the vendor. Some of these are quite large, for example, the flight simulator game in Microsoft's Excel 97. We must defend ourselves against such features in election software! Because software testing and inspection are themselves weak defenses, we must ask about the character and integrity of the software developers. Unfortunately, Diebold and its corporate predecessors involved in developing the AccuVote TS have a record of hiring convicted felons as software developers, including one, Jeffrey Dean, who was found guilty of computer-based embezzlement.

Illicit software has also been inserted into applications by testing authorities! Consider the case of Ronald Harris, an employee of the Nevada Gaming Control Board, who was convicted in 1997 for rigging the computerized slot machines when he was supposed to be testing them for honesty. It is noteworthy that slot machines are generally subject to more intense oversight than voting machines. We must defend ourselves against such threats to our voting system.

- A person would need physical access to the main computer to break into the election management system. This computer is password protected and is located in a secure location.

This is false! There are many ways to attack a computer through network connections, including through attacks by dial-up modem. The election management systems used in Maryland run on computers that have dial-up modems, and they run versions of Microsoft Windows, an operating system that is notoriously insecure.

- The voting units and the main computers are never connected to the Internet.

We know, from the SAIC report on Maryland's voting system, that the election management systems were directly connected to the Internet. We can hope that such direct connections have been eliminated, but eliminating such connections does not guarantee much.

Maryland's voting system uses modem connections, through the public dial-up telephone network, to connect from polling places to the election management system at the close of the polls. This means that a hacker could attempt to enter the election management system through the dial-up modem connection.

Also note that ATMs are not connected to the Internet, yet in late 2003 it was found that several Diebold ATMs had become infected with the "Nachi" worm! All that it takes is connection, briefly, to another computer that was infected when it, in turn, was briefly connected to the

Internet.

Myth 5, again, is best characterized as a straw-man argument, since Trojan horse attacks and attacks by hackers each represent only a small fraction of the attacks from which we desire defense. Here, though, the problem is compounded by false and misleading assertions among the "facts" presented as refutations.

Myth 6

"A person could intercept the electronically transmitted unofficial and incomplete election results."

FACTS

- The data on the memory cards inside the voting machine become the official results. These cards are transported to the local election office by sworn election judges.

This is correct. The best practice is to have the ballot transport done in the joint custody of two judges, representing opposing parties, so that nobody every has sole access to the ballots, whether in paper or electronic form. It is unclear whether such a procedure is required in Maryland's *Judge's Manuals*.

With conventional ballot boxes, putting the ballot box in the joint custody of two people was quite easy. When the ballot box is reduced to an electronic format, a PCMCIA card, the entire concept of joint custody and observability begins to collapse. The PCMCIA cards used for this purpose in Maryland are the size of a playing card, and therefore vulnerable to sleight of hand manipulation. As a result, unlike conventional ballot boxes, it is almost impossible for an observer to see that the memory card inserted in the envelope for transport to the canvassing center is indeed the one that was pulled from the machine.

- Results are only official once all memory cards have been physically uploaded directly into the elections server.

This is correct, but it is noteworthy that the memory cards used by Maryland's system are fully compatible with any laptop computer or PDA that has a PCMCIA slot; many do. If someone had the inside knowledge needed to modify the contents of the memory card, the necessary technology is commonplace. Furthermore, just as there is a risk of sleight of hand manipulation at the precinct, there is also such a risk at the canvassing center when cards are handled for uploading into the elections server.

- Final reconciliation of official and unofficial results would immediately uncover discrepancies.

This is correct, but the wording of this answer leaves open the question of whether or not this reconciliation is mandatory, and it also leaves out the question of how discrepancies, if found, are resolved.

The best practice with precinct-count electronic systems, whether they are optical mark-sense scanners or DRE voting systems, is to print the vote totals on paper immediately after the polls close, before any modem connections are made to the outside world. One copy of the printed totals should be posted, in public. A second copy should be included with the electronic record (the PCMCIA card, as used in Maryland), and only after these copies are printed should the voting system be connected to the telephone for modem transmission of the unofficial totals. This procedure is well documented in Georgia's administrative code, section 183-1-12-.02, section (5) (a)3. While there are hints of such a procedure in Subtitle 33.10 of Code of Maryland Regulations, it does not appear to be implied by Maryland Election Law, 11-202. Election judges - Procedures for vote counting; if such a procedure is actually required, it must therefore be in the *Judge's Manual* provided to each county.

The best practice ensures that observers can make their own record of the precinct totals in order to independently confirm that they are correctly incorporated into the canvass, and it ensures that a paper record as well as an electronic record are hand-delivered to the counting center, so that any corruption of the official electronic record by counting center computers can be defended against by reconciliation against the paper record. In Miami-Dade County, this reconciliation is done routinely after every election. No such reconciliation appears to be mandated in Subtitle 33.08 of Code of Maryland Regulations, but there are hints in 33.08.01.10 that local boards have the authority (but probably not the obligation) to include such a reconciliation as part of a post-election audit.

Finally, rules are needed to handle discrepancies. It is not sufficient merely to state that, in the event of discrepancy, it shall be investigated and resolved (Regulation 33.08.01.10 does this, for example) but this is better than a statement, by fiat, that one or the other record shall govern. If a discrepancy is found between the records transmitted by modem and the records delivered by hand, both should be considered suspect, the integrity of both should be investigated, and the records that conform most closely to other evidence should be accepted. Comparison of the number of voters recorded with the pollbook and comparison with independently transmitted copies of the election totals can all be used to resolve discrepancies.

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This material originated as an E-mail reply to an inquiry from Van Smith on July 9, 2004, and was indexed on the web on July 18, 2004.

Afterword, added Sept. 13, 2004

On July 15, I sent E-mail to Nicole Trella, the contact person listed on one version of the Myths versus Facts brochure (not all versions listed a contact person), as well as Linda Schade, Bob Ferraro and Avi Rubin, asking for comments on this material. I received constructive comments, acknowledged above, from all but Trella. I released this material for public consumption on the World Wide Web on July 18.

On August 10, I received notice from the University of Iowa that Linda Lamone, director of elections for the state of Maryland, had written the president of the University of Iowa to request that this material be removed from the University of Iowa Web Site so that her office could be "provided the opportunity to correct several incorrect and misleading statements contained in Dr. Jones' response." I have never seen the full letter to the University, only the official response denying her request.

In response, I immediately wrote Nicole Trella and the Maryland Board of Elections, attaching a brief quotation from my original E-mail soliciting comments and repeating my request for constructive criticism, while expressing displeasure with the approach Linda Lamone had taken in her response to this material.

Nicole Trella replied to this E-mail on August 18, indicating that a spam filter had stripped my July 15 E-mail of content, so she had never seen more than the headers. I have had similar experiences (living behind 3 layers of E-mail filters, two of which I do not really control), so I sympathize. She wrote that she had hoped to provide corrections and suggestions but has not had the time to do so. I have yet to receive any specific feedback from anyone affiliated with the Maryland Board of Elections.

Worse Than 2000: Tuesday's Electoral DisasterBy William Rivers Pitt
truthout | Report

Monday 08 November 2004

Everyone remembers Florida's 2000 election debacle, and all of the new terms it introduced to our political lexicon: Hanging chads, dimpled chads, pregnant chads, overvotes, undervotes, Sore Losers, Jews for Buchanan and so forth. It took several weeks, battalions of lawyers and a questionable decision from the U.S. Supreme Court to show the nation and the world how messy democracy can be. By any standard, what happened in Florida during the 2000 Presidential election was a disaster.

What happened during the Presidential election of 2004, in Florida, in Ohio, and in a number of other states as well, was worse.

Some of the problems with this past Tuesday's election will sound all too familiar. Despite having four years to look into and deal with the problems that cropped up in Florida in 2000, the 'spoiled vote' chad issue reared its ugly head again. Investigative journalist Greg Palast, the man almost singularly responsible for exposing the more egregious examples of illegitimate deletions of voters from the rolls, described the continued problems in an article published just before the election, and again in an article published just after the election.

Four years later, and none of the Florida problems were fixed. In fact, by all appearances, they spread from Florida to Ohio, New Mexico, Michigan and elsewhere. Worse, these problems only scratch the surface of what appears to have happened in Tuesday's election. The fix that was put in place to solve these problems - the Help America Vote Act passed in 2002 after the Florida debacle - appears to have gone a long way towards making things worse by orders of magnitude, for it was the Help America Vote Act which introduced paperless electronic touch-screen voting machines to millions of voters across the country.

At first blush, it seems like a good idea. Forget the chads, the punch cards, the archaic booths like pianos standing on end with the handles and the curtains. This is the 21st century, so let's do it with computers. A simple screen presents straightforward choices, and you touch the spot on the screen to vote for your candidate. Your vote is recorded by the machine, and then sent via modem to a central computer which tallies the votes. Simple, right?

Not quite.

big picture



A Diebold voting machine.

Is there any evidence that these machines went haywire on Tuesday? Nationally, there were more than 1,100 reports of electronic voting machine malfunctions. A few examples:

- In Broward County, Florida, election workers were shocked to discover that their shiny new machines were counting backwards. "Tallies should go up as more votes are counted," according to this report. "That's simple math. But in some races, the numbers had gone down. Officials found the software used in Broward can handle only 32,000 votes per precinct. After that, the system starts counting backward."
- In Franklin County, Ohio, electronic voting machines gave Bush 3,893 extra votes in one precinct alone. "Franklin County's unofficial results gave Bush 4,258 votes to Democratic challenger John Kerry's 260 votes in Precinct 1B," according to this report. "Records show only 638 voters cast ballots in that precinct. Matthew Damschroder, director of the Franklin County Board of Elections, said Bush received 365 votes there. The other 13 voters who cast ballots either voted for other candidates or did not vote for president."
- In Craven County, North Carolina, a software error on the electronic voting machines awarded Bush 11,283 extra votes. "The Elections Systems and Software equipment," according to this report, "had downloaded voting information from nine of the county's 26 precincts and as the absentee ballots were added, the precinct totals were added a second time. An override, like those occurring when one attempts to save a computer file that already exists, is supposed to prevent double counting, but did not function correctly."
- In Carteret County, North Carolina, "More than 4,500 votes may be lost in one North Carolina county because officials believed a computer that stored ballots electronically could hold more data than it did. Local officials said UniLect Corp., the maker of the county's electronic voting system, told them that each storage unit could handle 10,500 votes, but the limit was actually 3,005 votes. Officials said 3,005 early votes were stored, but 4,530 were lost."
- In LaPorte County, Indiana, a Democratic stronghold, the electronic voting machines decided that each precinct only

had 300 voters. "At about 7 p.m. Tuesday," according to this report, "it was noticed that the first two or three printouts from individual precinct reports all listed an identical number of voters. Each precinct was listed as having 300 registered voters. That means the total number of voters for the county would be 22,200, although there are actually more than 79,000 registered voters."

- In Sarpy County, Nebraska, the electronic touch screen machines got generous. "As many as 10,000 extra votes," according to this report, "have been tallied and candidates are still waiting for corrected totals. Johnny Boykin lost his bid to be on the Papillion City Council. The difference between victory and defeat in the race was 127 votes. Boykin says, 'When I went in to work the next day and saw that 3,342 people had shown up to vote in our ward, I thought something's not right.' He's right. There are not even 3,000 people registered to vote in his ward. For some reason, some votes were counted twice."

Stories like this have been popping up in many of the states that put these touch-screen voting machines to use. Beyond these reports are the folks who attempted to vote for one candidate and saw the machine give their vote to the other candidate. Sometimes, the flawed machines were taken off-line, and sometimes they were not. As for the reports above, the mistakes described were caught and corrected. How many mistakes made by these machines were not caught, were not corrected, and have now become part of the record?

The flaws within these machines are well documented. Professors and researchers from Johns Hopkins performed a detailed analysis of these electronic voting machines in May of 2004. In their results, the Johns Hopkins researchers stated, "This voting system is far below even the most minimal security standards applicable in other contexts. We identify several problems including unauthorized privilege escalation, incorrect use of cryptography, vulnerabilities to network threats, and poor software development processes. We show that voters, without any insider privileges, can cast unlimited votes without being detected by any mechanisms within the voting terminal software."

"Furthermore," they continued, "we show that even the most serious of our outsider attacks could have been discovered and executed without access to the source code. In the face of such attacks, the usual worries about insider threats are not the only concerns; outsiders can do the damage. That said, we demonstrate that the insider threat is also quite considerable, showing that not only can an insider, such as a poll worker, modify the votes, but that insiders can also violate voter privacy and match votes with the voters who cast them. We conclude that this voting system is unsuitable for use in a general election."

Many of these machines do not provide the voter with a paper ballot that verifies their vote. So if an error - or purposefully inserted malicious code - in the untested machine causes their vote to go for the other guy, they have no way to verify that it happened. The lack of a paper ballot also means the end of recounts as we have known them; now, on these new machines, a recount amounts to pushing a button on the machine and getting a number in return, but without those paper ballots to do a comparison, there is no way to verify the validity of that count.

Worst of all is the fact that all the votes collected by these machines are sent via modem to a central tabulating computer which counts the votes on Windows software. This means, essentially, that any gomer with access to the central tabulation machine who knows how to work an Excel spreadsheet can go into this central computer and make wholesale changes to election totals without anyone being the wiser.

Bev Harris, who has been working tirelessly since the passage of the Help America Vote Act to inform people of the dangers present in this new process, got a chance to demonstrate how easy it is to steal an election on that central tabulation computer while a guest on the CNBC program 'Topic A With Tina Brown.' Ms. Brown was off that night, and the guest host was none other than Governor Howard Dean. Thanks to Governor Dean and Ms. Harris, anyone watching CNBC that night got to see just how easy it is to steal an election because of these new machines and the flawed processes they use.

"In a voting system," Harris said on the show, "you have all the different voting machines at all the different polling places, sometimes, as in a county like mine, there's a thousand polling places in a single county. All those machines feed into the one machine so it can add up all the votes. So, of course, if you were going to do something you shouldn't to a voting machine, would it be more convenient to do it to each of the 4000 machines, or just come in here and deal with all of them at once? What surprises people is that the central tabulator is just a PC, like what you and I use. It's just a regular computer."

Harris then proceeded to open a laptop computer that had on it the software used to tabulate the votes by one of the aforementioned central processors. Journalist Thom Hartman describes what happened next: "So Harris had Dean close the Diebold GEMS tabulation software, go back to the normal Windows PC desktop, click on the 'My Computer' icon, choose 'Local Disk C:,' open the folder titled GEMS, and open the sub-folder 'LocalDB' which, Harris noted, 'stands for local database, that's where they keep the votes.' Harris then had Dean double-click on a file in that folder titled Central Tabulator Votes,' which caused the PC to open the vote count in a database program like Excel. 'Let's just flip those,' Harris said, as Dean cut and pasted the numbers from one cell into the other. Harris sat up a bit straighter, smiled, and said, 'We just edited an election, and it took us 90 seconds.'"

Any system that makes it this easy to steal or corrupt an election has no business being anywhere near the voters on election day.

The counter-argument to this states that people with nefarious intent, people with a partisan stake in the outcome of an election, would have to have access to the central tabulation computers in order to do harm to the process. Keep the partisans away from the process, and everything will work out fine. Surely no partisan political types were near these machines on Tuesday night when the votes were counted, right?

One of the main manufacturers of these electronic touch-screen voting machines is Diebold, Inc. More than 35 counties in Ohio alone used the Diebold machines on Tuesday, and millions of voters across the country did the same. According to the Center for Responsive Politics, Diebold gave \$100,000 to the Republican National Committee in 2000, along with additional contributions between 2001 and 2002 which totaled \$95,000. Of the four companies competing for the contracts to manufacture these voting machines, only Diebold contributed large sums to any political party. The CEO of Diebold is a man named Walden O'Dell. O'Dell was very much on board with the Bush campaign, having said publicly in 2003 that he is "committed to helping Ohio deliver its electoral votes to the president next year."

So much for keeping the partisans at arm's length.

Is there any evidence that vote totals were deliberately tampered with by people who had a stake in the outcome? Nothing specific has been documented to date. Jeff Fisher, the Democratic candidate for the U.S. House of Representatives from Florida's 16th District, claims to have evidence that the Florida election was hacked, and says further that he knows who hacked it and how it was done. Such evidence is not yet forthcoming.

There are, however, some disturbing and compelling trends that indicate things are not as they should be. This chart displays a breakdown of counties in Florida. It lists the voters in each county by party affiliation, and compares expected vote totals to the reported results. It also separates the results into two sections, one for 'touch-screen' counties and the other for optical scan counties.

Over and over in these counties, the results, based upon party registration, did not come close to matching expectations. It can be argued, and has been argued, that such results indicate nothing more or less than a President getting cross-over voters, as well as late-breaking undecided voters, to come over to his side. These are Southern Democrats, and the numbers from previous elections show that many have often voted Republican. Yet the news wires have been inundated for well over a year with stories about how stridently united Democratic voters were behind the idea of removing Bush from office. It is worth wondering why that unity did not permeate these Democratic voting districts. If that unity was there, it is worth asking why the election results in these counties do not reflect this.

Most disturbing of all is the reality that these questionable Diebold voting machines are not isolated to Florida. This list documents, as of March 2003, all of the counties in all of the 37 states where Diebold machines were used to count votes. The document is 28 pages long. That is a lot of counties, and a lot of votes, left in the hands of machines that have a questionable track record, that send their vote totals to central computers which make it far too easy to change election results, that were manufactured by a company with a personal, financial, and publicly stated stake in George W. Bush holding on to the White House.

big picture



This map indicates where different voting devices were used nationally. The areas where electronic voting machines were used is marked in blue.

A poster named 'TruthIsAll' on the DemocraticUnderground.com forums laid out the questionable results of Tuesday's election in succinct fashion: "To believe that Bush won the election, you must also believe: That the exit polls were wrong; that Zogby's 5pm election day calls for Kerry winning Ohio and Florida were wrong (he was exactly right in his 2000 final poll); that Harris' last-minute polling for Kerry was wrong (he was exactly right in his 2000 final poll); that incumbent rule #1 - undecideds break for the challenger - was wrong; That the 50% rule - an incumbent doesn't do better than his final polling - was wrong; That the approval rating rule - an incumbent with less than 50% approval will most likely lose the election - was wrong; that it was just a coincidence that the exit polls were correct where there was a paper trail and incorrect (+5% for Bush) where there was no paper trail; that the surge in new young voters had no positive effect for Kerry; that Kerry did worse than Gore against an opponent who lost the support of scores of Republican newspapers who were for Bush in 2000; that voting machines made by Republicans with no paper trail and with no software publication, which have been proven by thousands of computer scientists

to be vulnerable in scores of ways, were not tampered with in this election."

In short, we have old-style vote spoilage in minority communities. We have electronic voting machines losing votes and adding votes all across the country. We have electronic voting machines whose efficiency and safety have not been tested. We have electronic voting machines that offer no paper trail to ensure a fair outcome. We have central tabulators for these machines running on Windows software, compiling results that can be demonstrably tampered with. We have the makers of these machines publicly professing their preference for George W. Bush. We have voter trends that stray from the expected results. We have these machines counting millions of votes all across the country.

Perhaps this can all be dismissed. Perhaps rants like the one posted by 'TruthIsAll' are nothing more than sour grapes from the side that lost. Perhaps all of the glitches, wrecked votes, unprecedented voting trends and partisan voting-machine connections can be explained away. If so, this reporter would very much like to see those explanations. At a bare minimum, the fact that these questions exist at all represents a grievous undermining of the basic confidence in the process required to make this democracy work. Democracy should not ever require leaps of faith, and we have put the fate of our nation into the hands of machines that require such a leap. It is unacceptable across the board, and calls into serious question not only the election we just had, but any future election involving these machines.

Representatives John Conyers, Jerrold Nadler and Robert Wexler, all members of the House Judiciary Committee, posted a letter on November 5th to David Walker, Comptroller General of the United States. In the letter, they asked for an investigation into the efficacy of these electronic voting machines. The letter reads as follows:

November 5, 2004

The Honorable David M. Walker
Comptroller General of the United States
U.S. General Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Walker:

We write with an urgent request that the Government Accountability Office immediately undertake an investigation of the efficacy of voting machines and new technologies used in the 2004 election, how election officials responded to difficulties they encountered and what we can do in the future to improve our election systems and administration.

In particular, we are extremely troubled by the following reports, which we would also request that you review and evaluate for us:

In Columbus, Ohio, an electronic voting system gave President Bush nearly 4,000 extra votes. ("Machine Error Gives Bush Extra Ohio Votes," Associated Press, November 5)

An electronic tally of a South Florida gambling ballot initiative failed to record thousands of votes. "South Florida OKs Slot Machines Proposal," (Id.)

In one North Carolina county, more than 4,500 votes were lost because officials mistakenly believed a computer that stored ballots could hold more data than it did. "Machine Error Gives Bush Extra Ohio Votes," (Id.)

In San Francisco, a glitch occurred with voting machines software that resulted in some votes being left uncounted. (Id.)

In Florida, there was a substantial drop off in Democratic votes in proportion to voter registration in counties utilizing optical scan machines that was apparently not present in counties using other mechanisms.

The House Judiciary Committee Democratic staff has received numerous reports from Youngstown, Ohio that voters who attempted to cast a vote for John Kerry on electronic voting machines saw that their votes were instead recorded as votes for George W. Bush. In South Florida, Congressman Wexler's staff received numerous reports from voters in Palm Beach, Broward and Dade Counties that they attempted to select John Kerry but George Bush appeared on the screen. CNN has reported that a dozen voters in six states, particularly Democrats in Florida, reported similar problems. This was among over one thousand such problems reported. ("Touchscreen Voting Problems Reported," Associated Press, November 5)

Excessively long lines were a frequent problem throughout the nation in Democratic precincts, particularly in Florida and Ohio. In one Ohio voting precinct serving students from Kenyon College, some voters were required to wait more than eight hours to vote. ("All Eyes on Ohio," Dan Lothian, CNN, November 3)

We are literally receiving additional reports every minute and will transmit additional information as it comes available. The essence of democracy is the confidence of the electorate in the accuracy of voting methods and the fairness of voting procedures. In 2000, that confidence suffered terribly, and we fear that such a blow to our democracy may have occurred in 2004.

Thank you for your prompt attention to this inquiry.

Sincerely,

John Conyers, Jr., Jerrold Nadler, Robert Wexler

Ranking Member, Ranking Member, Member of Congress
House Judiciary Committee, Subcommittee on the Constitution

cc: Hon. F. James Sensenbrenner, Chairman

"The essence of democracy," wrote the Congressmen, "is the confidence of the electorate in the accuracy of voting methods and the fairness of voting procedures. In 2000, that confidence suffered terribly, and we fear that such a blow to our democracy may have occurred in 2004." Those fears appear to be valid.

John Kerry and John Edwards promised on Tuesday night that every vote would count, and that every vote would be counted. By Wednesday morning, Kerry had conceded the race to Bush, eliciting outraged howls from activists who were watching the reports of voting irregularities come piling in. Kerry had said that 10,000 lawyers were ready to fight any wrongdoing in this election. One hopes that he still has those lawyers on retainer.

According to black-letter election law, Bush does not officially get a second term until the electors from the Electoral College go to Washington D.C on December 12th. Perhaps Kerry's 10,000 lawyers, along with a real investigation per the request of Conyers, Nadler and Wexler, could give those electors something to think about in the interim.

In the meantime, soon-to-be-unemployed DNC chairman Terry McAuliffe sent out an email on Saturday night titled 'Help determine the Democratic Party's next steps.' In the email, McAuliffe states, "If you were involved in these grassroots activities, we want to hear from you about your experience. What did you do? Did you feel the action you took was effective? Was it a good experience for you? How would you make it better? Tell us your thoughts." He provided a feedback form where such thoughts can be sent.

Use the form. Give Terry your thoughts on the matter. Ask him if those 10,000 lawyers are still available. It seems the validity of Tuesday's election remains a wide-open question.

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Article Last Updated: 6/10/2005 08:41 AM

State expected to OK new voting system

Diebold machine's flaws have been fixed since tests in spring, official says

By Ian Hoffman, STAFF WRITER
Inside Bay Area

In less than a week, state officials are poised to approve a new Diebold electronic-voting system that several large counties, including Alameda, want to use. But the system showed problems in security, protection of voter privacy and printing of a paper trail during testing this spring.

State elections authorities have obscured the full nature of those problems by blacking out parts of test reports that have been released under the state public records act and declaring other documents too full of Diebold "trade secrets" for public release.

During tests in late April and early May, a chief feature of Diebold's new computerized voting machine — the ability to print out voters' electronic choices so they can be verified and, if needed, recounted — performed so poorly that the state's testing consultant concluded, "This version is not ready for use in an election."

Assistant Secretary of State Brad Clark, a former Alameda County registrar, said Thursday the problems have been fixed and the Diebold system desired by county elections officials is ready for state consideration.

A panel advising Secretary of State Bruce McPherson is to vote on approval of the new

Diebold touch-screen voting system next week. Elections officials say new systems like Diebold's are essential if California counties are to meet January 2006 federal mandates for handicapped voting and state mandates for providing a voter-verifiable paper record.

"The more options that are out there for the counties to use, the better off we are," Clark said.

Diebold's first efforts to secure approval for its AccuVote TSx in California ended in public distrust of all electronic voting and consideration of criminal charges against Diebold. That's partly because Diebold officials persuaded four counties to spend more than \$40 million on the TSx — and state elections officials to approve its use in the 2004 presidential primary — before the system made it through lab tests and federal approval.

Secretary of State Kevin Shelley rescinded the TSx approval in April, and thousands of the machines now sit in climate-controlled warehouses in San Diego, San Joaquin and Kern counties.

Solano County dropped its Diebold machines and switched to another vendor. Alameda County elections officials want to swap out 4,000 older AccuVote TS machines for the TSx, which is smaller, lighter and equipped with a printer for generating a paper record of a voter's choices for the voter to verify.

Before applying to California for approval, voting-system makers are required by state elections rules to subject their machines to lab tests and federal approval, then draw up procedural and training manuals for using them. None of this was done in October 2003 nor before Diebold applied for approval again in March.

"We're going through the same kind of scenario, not only from Diebold but from the (secretary of state's) elections division," said Jody Holder, a voting activist who unearthed reports on state tests of the new Diebold machines and e-mails between the state and Diebold through a public records request. "You can see from the e-mails between them that they're bending over backward."

"There's a sense of déjà vu in this rush," said Kim Alexander, president of the California Voter Foundation, a nonprofit group based in Davis.

During the testing in late April and early May, the state's voting systems consultant, Steven Freeman, found that the TSx machines generally were an improvement on Diebold's earlier machines but still had security flaws. For example, contrary to state election rules, the system was unable to allow different levels of security access to the machine's software and data, so that lower-level users can perform basic functions but only administrators can change or add software. The rest of Freeman's discussion of security problems was blacked out by state lawyers.

But the bigger problems were with the paper-trail printer. Freeman reported "several persistent problems with the paper feed" that resulted in a "jam condition." The printer canister kept popping out of place, he noted.

"Attempts were made to tape the canister down but failures still occurred, and someone had to hold the canister in place," his report says.

Keith Carson, president of the Alameda County Board of Supervisors, persuaded colleagues to have a public hearing so that Diebold and its critics could debate the merits of its voting system. Carson wants to hear what people say before investing another \$5.4 million in a touch-screen voting system that the county purchased three years ago for

\$12 million.

"The question for me is, to what extent can we guarantee that everyone who participates in the voting process can have confidence that their vote counted," he said. "That to me is going to weigh as heavily as the dollars we have invested in a system that has been constantly in question."

Contact Ian Hoffman at ihoffman@dailyreviewonline.com.



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Message

Posted on Monday, May 09, 2005 - 03:18 pm:



Large payments from Diebold are fueling influence-peddling for a \$45 million Cook County/Chicago voting machine contract. Diebold has been lobbying both Ohio and Cook County/Chicago through a small corporation formed by a Republican and two well-connected Democrats. Diebold is reportedly making payments directly to the individuals and payments are also flowing through a corporation formed by the three partners. These payments are then paid out to others. When asked what the payments to others are buying, Black Box Voting was told that the Diebold funds pay "subcontractors." We asked what the subcontractors do, and were told that they do "largely persuasion."

Discuss this article here:

<http://www.bbvforums.org/forums/messages/72/5605.html>

Election reform advocates are noticing something: Neither Republicans nor Democrats seem to have much interest in real reform. Black Box Voting has been looking into the process of voting system procurement. What we are finding explains a lot. Both Republicans and Democrats have been cashing in, and both parties may have become too beholden to take effective corrective action. Instead of real efforts to get at the truth, we are seeing attempts to control the message, with "investigations" and "reform" actions that appear to be little more than window dressing.

In 2001, Anthony Celebrezze Jr. -- a former Democratic Ohio secretary of state and attorney general -- met with a powerful Republican, John Sununu, to discuss a project selling Global Election Systems (now Diebold Election Systems). Sununu is a former governor of New Hampshire and was White House Chief of Staff under George H.W. Bush.

Sununu disappeared from the paperwork. In June 2003, Celebrezze formed a corporation with Pasquale "Pat" Gallina, a close associate of late Cuyahoga County (Cleveland) Republican Chairman Robert E. Hughes. Gallina had also been the campaign manager for former Republican Cleveland Mayor Ralph Perk. Together, Celebrezze and Gallina set out to sell Diebold machines to the state of Ohio, but a few weeks after forming the corporation, Celebrezze died of heart failure.

Diebold's surviving Ohio lobbyist, Pasquale "Pat" Gallina, has quite a checkered past. His earlier business partners include two convicted felons, Andrew Shission and Joseph LoConti -- both targets of federal investigations because of alleged links to organized crime. Shission was an accountant for the Hell's Angels who had been indicted for two murders, but was acquitted. He then went to jail on tax evasion and obstruction of justice. Joseph LoConti was convicted of failure to file tax returns.

A third partner, Dr. Juan Andrade Jr., joined Gallina and Celebrezze to form a Diebold sales entity, called "ACG Group, LLC." Andrade, a national pillar of the Hispanic community, founded the U.S. Hispanic Leadership Institute (USHLI). He is closely connected to the Democratic power structure, and is the recipient of the prestigious Presidential Citizens Medal, bestowed by President Bill Clinton. Andrade is an outspoken critic of the Bush Administration, and donated heavily to John Kerry in 2004.

Dr. Juan Andrade Jr.

Black Box Voting conducted a videotaped interview with Andrade on April 28 in his office at USHLI. Andrade had scheduled an interview with another journalist. Knowing that Andrade was quietly accepting large monthly payments from Diebold, Black Box Voting managed to piggyback into the interview, to ask Andrade questions about his Diebold activities. We made it clear immediately to Andrade at the beginning of the interview that we were from Black Box Voting, and that we would have additional questions. He agreed to answer our questions, and also said that Black Box Voting is taken seriously and does very important watchdog work.

Andrade admitted that he has been receiving a monthly retainer from Diebold, but refused to say how much. Black Box Voting has obtained independent records showing that Andrade has been receiving an unusually high fee, \$20,000 per month, from Diebold. Accounting records from Diebold list such fees as "Success Fees" but Andrade referred to them as his "retainer" for helping sell the machines, and said that "the money goes to me, and through the company." Andrade stated that the funds flowing through the ACG Group pay "subcontractors to help with some of the work, the same kind of work."

"One person can't do this job alone in a county this size," he said. When asked what the subcontractors do, Andrade referred to the payments as "largely persuasion" to gain public support. Black Box

Voting has been unable to find anything "public" about the Cook County/Chicago Diebold deal.

Andrade is not registered as a lobbyist with either the state of Ohio or Illinois, but says he is registered in Cook County. Illinois law requires him to register in the county where he is doing business, to disclose how much he is being paid, and to provide statements every six months listing what he spends, on whom, and for what. (1)

Andrade has been considered a voting rights leader for the Hispanic community. He has received an award from Bill Clinton. Yet, he seems to have been very quiet about his involvement with Diebold. We were unable to locate any document or news article showing that Andrade has mentioned that he is one of Diebold's highest-paid lobbyists. When asked, Andrade said that he disclosed his relationship with Diebold in Dec. 2003. We asked him where this was disclosed, Andrade said it was at "our conference" [USHLI?] and added that he had resigned as Executive Director of USHLI in Dec. 2003, though he remained as president. However, as of today, May 9, 2005, he is still listed on the USHLI Web site as "President and Executive Director" (2). Black Box Voting interviewed Andrade in his USHLI office. (The ACG office is located in the same building.)

Andrade's description of disclosure doesn't quite hang together. The USHLI annual conference was held in September 2003, not December, and the ACG Group ("Andrade Celebrezze & Gallina") was incorporated in Ohio in June 2003. If Andrade's name was on a corporation to sell voting machines in June, why did he not disclose it to his constituency until December?

Andrade told Black Box Voting that he got his start on Hispanic issues in Chicago, but we have found that he set up shop first in Columbus, Ohio, during a time while Gallina and Celebrezze were also in Columbus. (3)(4)(5) He started with a group called the Ohio League for Hispanic Affairs in 1977. He never mentioned having ever been in Ohio in the interview.

Andrade's Illinois organization started as "Mid-West Voter Registration and Education Project." Later, Andrade changed the name to "Midwest/Northeast Voter Registration and Education Project. Still later, he changed the name to "U.S. Hispanic Leadership Institute". (6)

Andrade told us that initially, Diebold had approached him and what he brought to the table was not "technical" expertise. He made a decision to work for Diebold based solely on Diebold's presentation on the machines, and admitted that he did not seek any independent evaluation of their ability to count votes securely or accurately. This was the extent of his due diligence.

When we asked Andrade why he, as a high-profile leader in the area of Hispanic voting rights, would get involved at all in selling voting machines, he replied that he had tried everything else. He

had done voter registration. He had fought redistricting battles. He had been involved in mentoring and training leaders. Now he wants to put the machines of his choice into Cook County. He said that sometimes it is surprising who you have to get into bed with.

We, too, were surprised at Andrade's poorly disclosed bedfellows. Internal Diebold memos (7) obtained by Black Box Voting show that Andrade has been included in the decisionmaking loop with elite level managers and executives at Diebold Election Systems, Inc. (DESI): Andrade has been included in meetings and discussions with DESI Chief Financial Officer Greg Loe, Senior manager Dave Byrd, and national staffing head Beatta McInerney.

Black Box Voting is governed by a majority of board members who are minorities. This interview, and this story, is one of the most difficult we have ever done. The conflicts inherent in this blurring of lines among politicians, leaders, lobbyists and vendors, combined with the apparently habitual failure of everyone to properly disclose, is at the very root of our problems with election integrity. This story, and those that will follow in the Money Trail series, illustrate real-world issues that we will need to grapple with in order to achieve lasting change.

UPCOMING -- Part II: Gallina and the Ohio Players

Timeline:

Dec. 2001: Sununu, Celebrezze and Gallina met in Columbus to discuss selling voting machines to the state of Ohio. (8) We could not find any of them on the Ohio "List of Legislative Agents" registered as lobbyists for Diebold. (9)

June 2003: Andrade, Celebrezze and Gallina formed "ACG Group LLC," to sell Diebold voting machines to Ohio and Cook County/Chicago. (10) According to Andrade, "ACG Group" stands for Andrade, Celebrezze and Gallina. (11) Ohio corporate documents show that it was registered under "Pat Gallina Consulting." The name ACG reflects involvement of Andrade.

July 2003: Anthony Celebrezze died suddenly, reportedly of a heart attack. (12)

Aug. 2003: "Pat Gallina Consulting" was registered with the state of Ohio, (13) two months after it was listed as the incorporating agent for ACG Group LLC. Corporate documents are signed by Pasquale A. Gallina.

Dec. 17, 2003: ACG group was registered in the state of Illinois (14), with Andrade as corporate agent and Gallina's address listed as the repository for corporate documents.

Supporting information:




(1) Illinois and Cook County requirements for lobbyists

- (2) USHLI Web page from May 9, 2005: Dr. Juan Andrade Jr., Executive Director and President
- (3) Corporate documents, Ohio League of Hispanic Affairs
- (4) Mar. 24 1991 - *The Cleveland Plain Dealer* "Cabinet pick's ties to Hell's Angel probed in '86"... *"Gallina was the personnel director for the Ohio Lottery Commission until his resignation in December 1978, after he was named in a lawsuit that prompted federal, state and local officials to investigate alleged contract kickback schemes at the commission."*
- (5) Jul. 5 2003 - The Associated Press: "Obituaries in the News" *"Celebrezze Jr. was elected as a state senator in 1974. In 1978, he was elected secretary of state and in 1983 he was elected attorney general."*
- (6) Illinois Sec. State corp docs: Note that all three entities have the same number, meaning they are the same entity with a name change:
 - Midwest Voter Registration & Education Project
 - Midwest/Northeast Voter Registration & Education Project
 - U.S. Hispanic Leadership Institute
- (7) Diebold internal communications obtained by Black Box Voting
- (8) Dec. 6, 2001: *Cleveland Plain Dealer*, "Tubbs Jones for governor not very likely"
- (9) Ohio Lobbyist listings 2000-2005: 2000 2001 2002 2003 current
- (10) Corporate documents from Ohio Secretary of State for ACG Group
- (11) Videotaped interview, Apr. 28 2005, by Black Box Voting: 2-min clips
 - video clip 1
 - video clip 2
 - video clip 3
- (12) News article about Celebrezze death: Jul. 5 2003 - The Associated Press: "Obituaries in the News"
- (13) Corporate documents from Ohio Secretary of State for Pat Gallina Consulting
- (14) Illinois Secretary of State, corporate information for ACG Group LLC

Black Box Voting recommends a moratorium on new spending on voting systems until problems with quality and procurement procedures are resolved.

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March 8, 2005
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Emerging Scandal on MD Voting Machine Performance

All MD Diebold Machines on Lockdown

Under Investigation for Widespread Statewide Election Day 2004 Failures

MD Election Group Calls for Independent Investigation and De-Certification of Machines

Montgomery County, Maryland. According to county election officials and other sources, all Maryland voting machines have been on "lockdown" since November 2, 2004 due to statewide machine failures including 12% of machines in Montgomery County, some of which appear to have lost votes in significant numbers. The State Board of Elections convinced the media that Election Day went smoothly, when in fact there were serious statewide, systemic problems with the Diebold electronic voting machines -- so serious that the SBE and Diebold still have not figured out how to prevent the loss of votes in the future.

"Election Day was anything but smooth. Votes were lost, computer cards storing votes were unreadable, thousands of error messages were reported, machines froze in mid-voting and machines refused to boot up. The problems with the machines were so widespread and serious that efforts to hide the problems have failed," said Linda Schade, director of TrueVoteMD.org. "It is not sufficient for Diebold and the SBE to investigate themselves. They have misled the public about this problem and an independent investigation is needed. Further, these problems indicate that the Diebold machines should be decertified as required by Maryland law and as provided for in the Diebold contract. This is an opportunity to correct the mistaken purchase of paperless electronic voting machines. Diebold should refund Maryland tax dollars and we should start anew with a system that voters trust because it can be independently audited and recounts can be meaningful."

VOTES LOST According to the IT Report to the Montgomery County Election Board, dated December 13, 2004 there were two broad levels of problems. Seven percent of units (189) failed. This included failure to boot up, screen freezes and a variety of other problems. Screen freezes, which occurred on 106 voting units were "the most serious of errors" because many "froze when the voter pressed the Cast Ballot button." As a result "election judges are unable to provide substantial confirmation that the vote was in fact counted." In addition there were "122 suspect units (5%) were identified because the unit had few votes captured compared to other voting units in the polling place. A unit was considered suspect if it had 25-50 votes captured when all other units in the polling place had over 150 votes," the report stated. The IT report includes other details of Diebold machine failures including smart card and encoder problems as well as thousands of yet unexplained error messages, now called "ballot exception errors."

UNREADABLE PC MEMORY CARDS Multiple sources also have revealed that the computer memory cards where vote totals are stored inside each voting machine were unreadable in multiple counties.

DIEBOLD UNABLE TO RESOLVE TECHNICAL FAILURE FOUR MONTHS AFTER

ELECTION After IT examinations within Maryland failed to decipher the root of these problems, the State Board and Diebold sent voting machines to several out-of-state locations in Texas and Ohio for further testing, according to a Diebold memo dated February 16, 2005. As of the March 3, Montgomery County Election Board meeting, the PC memory card problems as well as those listed above cannot be explained by Diebold, according the IT report.

MACHINE FAILURES STATEWIDE Montgomery County Elections official Sam Statland has acknowledged that local boards around the state are gravely concerned about the Diebold system's performance and are pressuring the State Board of Elections for answers. In testimony before the State House Ways and Means on February 24, 2005, Mr. Statland cited the facts above and asserted that "Since the 2000 election cycle, the State of Maryland has become and still is a 'test site' for electronic voting." In the January State Board of Elections meeting, Linda Lamone discussed the "performance problems" and confirmed that "once [Montgomery County was] finished they will start the same process in the other counties, beginning with Baltimore County."

TRUEVOTEMD CALLS FOR INDEPENDENT REVIEW AND DECERTIFICATION OF MACHINES AS REQUIRED BY LAW TrueVoteMD.org, an election integrity organization, is now calling for an independent investigation and for de-certification of the machines as required by Maryland election law (MD Code, Election Law § 9-102(c)(1)).* TrueVoteMD.org is a founding organization for VoteTrustUSA a national network of state election integrity groups and has been raising the alarm that the electronic Diebold voting system has serious vulnerabilities to computer malfunction and fraud for nearly two years. This information is confirmed by TrueVoteMD's Election Day report "When the Right to Vote Goes Wrong: Md Voters Tell The Story of Election Day 2004"
<http://www.truevotemd.org/Resources/MDproblems04map.pdf>.

) "If the gubernatorial race in 2006 is as close as 2002 it would only take four errors per precinct to change the outcome of the election. Maryland cannot risk the election disaster that is impending. Maryland was lucky the presidential election in Maryland was not close; otherwise we would be embroiled in scandal to this day. It is time to put in place a system that is reliable and that voters can trust," concluded Schade. "Three independent reports have raised serious concerns with the security of Diebold machines, now we have seen the worst come to pass. These machines are unreliable and insecure. How many more warnings to Maryland officials need in order to take action to protect the vote?"

*MD Code, Election Law § 9-102(c)(1) (emphasis added). The SBE "shall decertify a previously certified voting system if" that system "[does not] protect the security of the voting process," and "[does not] count and record all votes accurately." Id. § 9-103(a)(2) (emphasis added).

Copies of the source documents mentioned in this release are available upon request by contacting TrueVoteMD.org.

###

TrueVoteMD is a non-partisan election integrity organization made up of candidates, elected officials, election judges, pollwatchers, and voters from all walks of life who support a voter-verified paper audit trail to ensure the accuracy, transparency and security of elections.

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THE CASE AGAINST DIEBOLD ELECTION SYSTEMS

April 27, 2005

PROBLEM: A RISKY CORPORATE CULTURE

Note: Diebold bought Global Election Systems in January 31, 2002.

- **Jeffrey Dean: 23 convictions for computer-embezzlement.** In 2000 he became head of research and development at Global, and worked on the voting and tabulation machines. He also became a director of Global that same year. As Diebold was buying Global, Dean left the company, but Diebold hired him back as a consultant. (http://www.blackboxvoting.org/bbv_chapter-8.pdf, pg. 84)
- The 3 founding members of Global have a **long criminal history of convictions** for stock fraud and other crimes in Canada. Even though they left (some were in jail) before Diebold bought Global, 2 key employees they hired joined Diebold. While those 2 employees do not have significant criminal records, one has to ask, were they originally hired to build fraudulent machines? What are they doing inside of Diebold? (http://www.blackboxvoting.org/bbv_chapter-8.pdf)
- From the office of California Secretary of State;
"STAFF REPORT ON THE INVESTIGATION OF DIEBOLD ELECTIONS SYSTEMS, INC.", April 20, 2004

(http://www.ss.ca.gov/elections/ks_dre_papers/diebold_report_april20_final.pdf):

"In sum, Diebold:

1. marketed and sold the TSx system **before it was fully functional, and before it was federally qualified;**
2. **misrepresented** the status of the TSx system in federal testing in order to obtain state certification;
3. **failed to obtain federal qualification** of the TSx system despite assurances that it would;
4. **failed even to pursue testing** of the firmware installed on its TSx machines in California until only weeks before the election, choosing instead to pursue testing of newer firmware that was even further behind in the ITA testing process and that, in some cases, required the use of other software that also was not approved in California;
5. **installed uncertified software** on election machines in 17 counties;
6. sought last-minute certification of allegedly essential hardware, software and firmware that had **not completed federal testing;** and
7. in doing so, jeopardized the conduct of the March Primary."

PROBLEM: SLOPPY SYSTEMS WIDE OPEN TO VOTE FRAUD

- A mission-critical system that actually counts votes must be tamper-proof. Diebold's GEMS vote tabulation program is wide open to voting fraud.

"Right now you can open GEMS' .mdb file with MS-Access, and alter its contents. That includes the audit log. ... Jane ... did some fancy footwork on the .mdb file in Gaston recently. I know our dealers do it. King County is famous for it. That's why we've never put a password on the file before."

- Ken Clark, Principle Engineer at Diebold, email, 18 Oct 2001,
(<http://www.equalccw.com/smokinggun.pdf>)

Note: The .mdb files are the data base files containing the vote totals and the audit log of who changed the data (votes).

To learn how this is done, go to <http://www.chuckherrin.com/hackthevotedemo.htm> and <http://www.equalccw.com/deandemo.html/>

See also "Inside A U.S. Election Vote Counting Program" (<http://www.scoop.co.nz/stories/HL0307/S00065.htm>).

The use of MS Access, well known as insecure, to count votes is appallingly unprofessional for a mission-critical product. Slacking mandatory password protection is worse.

- In their study of 2002 Diebold computer source code, four computer security experts "conclude that this voting system is **unsuitable for use in a general election.**" They go on to say "Our analysis shows that this voting system is **far below even the most minimal security standards** applicable in other contexts." ("Analysis of an Electronic Voting System", T. Kohno et al, IEEE Symposium on Security and Privacy 2004, available at <http://www.avirubin.com/vote.pdf>)
- Diebold machines have a long history of **miscounting votes**: (<http://www.votersunite.org/info/Dieboldinthenews.pdf>)

PROBLEM: CORPORATE COMMITMENT TO POLITICS

- "I am committed to helping Ohio deliver its electoral votes to the president next year." - Wally O'Dell, CEO, Diebold, 2003 (The New York Times, 9 November 2003; "Machine Politics In the Digital Age"). The Diebold CEO also organized a \$600,000 fund-raising party for the Mr. Cheney. (Akron Beacon Journal, 1 July 2003)

Individuals will, of course, have political preferences. But making a public commitment to deliver the key swing state of the 2004 election, especially in light of persistent ethics questions and the apparently deliberate openness of the machines to vote fraud, challenges the trustworthiness of Diebold systems. This commitment to one side therefore challenges the very elections that depend on them.

PROBLEM: PROFITS AHEAD OF CLEAN, SECURE, LOW-COST ELECTIONS

Diebold is a for-profit corporation. Making as much profit as they can comes ahead of clean, secure, low-cost elections. Rather than use off the shelf hardware and software, Diebold sells very expensive, single-purpose voting machines. Typical of the computing industry, their strategy is to lock customers (taxpayers) into their technology, and then "charge out the yin":

[The taxpayers] "already bought the system. At this point they are just closing the barn door. Let's just hope that as a company we are smart enough to **charge out the yin** if they try to change the rules now ..." - an email from ken@dieboldes.com, Friday 3 Jan 2003.
(<http://escott.net/Activism/Diebold/lists/support.w3archive/200301/mse00011.html>)

In Alameda County, CA, Diebold is asking for up to \$2,000,000 to upgrade existing software to handle instant runoff voting. Computer programmers agree that it should cost much less than that.

SOLUTION: OPEN VOTING CONSORTIUM

The Open Voting Consortium has developed prototypes of publicly programmed voting and vote-counting machines. The voting machines **print** the actual ballot that is used for counting. They also write a permanent record of the ballots to CD-ROM. This prevents ballot box stuffing and "lost" ballots. The

prototypes also protect the rights of the disabled to vote, and support instant runoff voting.

We are seeking funding to turn these prototypes into tested, certified voting systems. These clean computers will be secure, reliable, and open to inspection. The software will be free, and the hardware will use inexpensive, off-the-shelf parts. For more information, and to support clean elections, please visit our site at www.OpenVoting.Org.



Website: www.votersunite.org
 2005-05-06 10:00:00 AM

Discrepancies found in 35 percent of Miami-Dade precincts

May 06, 2005 By: Jessica M. Walker

In the latest South Florida election mishap, workers in 35 percent of Miami-Dade County's 749 polling places last November filed counts of voter signatures that differed from the number of ballots cast on the touch-screen voting machines, a new analysis has found.

On Nov. 2, election workers in 260 polling places submitted data to the Miami-Dade Supervisor of Elections office that did not match up with the total number of touch-screen ballots reported by the canvassing board, according to a study conducted by the Miami-Dade Election Reform Coalition a nonpartisan watchdog group.



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Out of those 260 polling places, 23 submitted totals that were off by more than 50 voters, while 68 submitted totals that were off by more than 10 voters. In one polling place, the difference was 1,284. That polling place was one of five that showed very large discrepancies. The coalition is studying those five for possible clerical errors.

Not including those five polling places, the percentage difference between the reported signature totals and the machine ballot counts varied from less than 1 percent to 34 percent. The differences included polling places where there were more reported signatures than ballots cast, and others where ballots cast exceeded reported signatures.

A Daily Business Review inspection of voter logs showed that in some polling places where there were discrepancies, the totals reported by election workers equaled the total number of voters in the precinct, including absentee and early voters. But the county reporting form for signature totals, Certificate No. 2, asks workers to fill in the total of polling place signatures only, not the total of absentee voters.

The reform coalition said the discrepancies cast doubt on the county's ability to check the accuracy of the controversial iVotronic touch-screen machines. Since there are no paper records votes cast, critics argue that it's essential for election officials to carefully reconcile the total of voter sign-in signatures with the electronic tallies on the machines. To ameliorate this problem, critics have urged that the machines be outfitted with printers to produce backup paper records of individual votes.

"The counting of signatures and reporting of discrepancies to the canvassing board are fundamental to counting votes correctly" said Martha Mahoney, a University of Miami law professor and member of the reform coalition who led the analysis. "It's really important to do this on election night. How do we know otherwise whether the machines are correctly reporting every vote?"

Seth Kaplan, a spokesman for the Miami-Dade supervisor of elections office said the discrepancies do not necessarily indicate voting machine malfunctions. Human error in counting and the lack of a policy for the inclusion of absentee and early voters could account for many of the mistakes, he said.

Kaplan said his department recognized that the signature counts were off and said it was something the supervisor of elections office would seek to improve in the future. "Are we batting 1.000 on them all being correct? No," Kaplan said. "It's a training issue. Whenever we become aware of issues, we re-emphasize those certain issues in training."

Kaplan said that under the department's new leadership, the discrepancies would likely be looked into. Former Supervisor Constance A. Kaplan, who is not related to Seth Kaplan, resigned after irregularities were found in the March 8 slot machine referendum.

"All of these procedures are under review, and these are the kind of things we want to tighten up," Kaplan said. "This is something that we will be looking at."

Miami-Dade County Commissioner Katy Sorenson, who served on the canvassing board in the 2004 elections, declined to comment on the discrepancies, saying she was not familiar with the coalition's study. "Things can happen where people decide not to vote, they can sign in and leave, so I don't really know if that's a problem," she said.

Jenny Nash, a spokeswoman for Florida Secretary of State Glenda Hood, said the issue of reconciling signature totals and machine counts was a local one and is not the concern of her office. "Each supervisor has their own process for how they reconcile the numbers," Nash said.

The discrepancies between the signatures and the ballots are not necessarily indicative of iVotronic machine problems or missing votes. In some instances the differences were due to sloppy counting of signatures by poll workers.

For example, Precinct 11 recorded 693 votes and 849 signatures. But a Daily Business Review inspection of the voting log found 694 signatures. Another precinct with a major difference was Precinct 362, which recorded 583 votes and 859 signatures. A review of that precinct's signature log found 580 signatures.

Nevertheless, inaccurate signature counts could interfere with the ability of the supervisor of elections office and the county canvassing board to promptly identify problems in a close election, such as machine malfunctions and election fraud, before the election results are certified.

Latest glitch

Miami-Dade and Broward counties have experienced a series of embarrassing election glitches since they adopted touch-screen voting systems in 2002. In March, Constance Kaplan resigned as elections supervisor after reporting to the county manager that in the vote on slot machines, nearly 1,300 fewer votes were recorded than there were voters who showed up to vote in the single-issue election. County leaders are considering switching to a paper

based optical scan system.

In an audit of the 2002 general election, the Miami-Dade Audit and Management Services Department found discrepancies between signatures and ballots cast in 48 randomly selected precincts. The audit found that the discrepancies did not affect any election outcomes. But it recommended greater attention to reconciling signature and ballot counts. It called that an "an important audit control, as well as a positive tool for promoting precinct worker corrective action."

Last October, the election reform coalition wrote to Secretary of State Hood, expressing its concern about the absence of a statewide system for reconciling voter signatures and electronic ballots.

"Despite the statutory requirement to account for voted ballots, the Polling Place Procedures Manual does not include a procedure for accounting for electronic ballots, counting signatures of voters, or explaining any gaps between these figures," the letter to Hood said.

Despite the letter, Hood did not put any such system in place in the touch screen counties.

Machine malfunction?

The voting process works like this: After entering the polling place but before casting a ballot on an iVotronic machine, Miami-Dade voters must sign next to their printed name in an election log of registered voters. At the end of Election Day, poll workers are responsible for counting the signatures and recording the total on Certificate No. 2, a paper document.

Poll workers are told prior to the election to compare the number of signatures to the number of votes tallied on the iVotronic machines to find discrepancies. Any differences could indicate vote fraud, election machine malfunction, poll worker error or other problems and should be reported to the department.

Seth Kaplan said that poll workers in the November election were told to visually check the signature count against the machine totals and to report any large differences to the department. However, that instruction was not written in the procedures guide for poll workers.

The reform coalition's analysis and a Daily Business Review spot check found numerous polling places where there were large discrepancies including polling places where there were more signatures reported than electronic ballots cast, and ones where there were more ballots cast than signatures reported.

At Precinct 124, the certificate documented 17 signatures, while the machines counted 1,301 votes. That precinct has been earmarked as a probable clerical error in the coalition's study. A check of the voter log by the Daily Business Review confirmed that there were far more than 17 signatures at the precinct.

It's the smaller differences that will be scrutinized by the coalition. For example, in Precinct 41 there were 910 votes and 844 signatures, a difference of 62. At combined Precinct 117/166, the ballots totaled 995 and

the signatures numbered 1,276.

In some of these polling places, Mahoney speculated, the differences may have been due to clerical errors by poll workers.

For Precinct 816, in the Church of the Ascension at 11201 SW 160th St., a Review inspection of the voter log showed 945 signatures, while the iVotronic computer tape showed a count of 1,032. But the individual machine counts are listed on the tape as well, and they add up to 945. But the number certified by the canvassing board came in at 1,116 votes.

In this case, the discrepancy may have been due to an iVotronic machine malfunction. Lynn Kaplan, a volunteer observer for the reform coalition who was at that polling place on Nov. 2, said in an interview that as a poll worker was closing down one of the iVotronic machines at the end of the day, an error message popped up on the machine's digital screen saying: "Internal malfunction/unit closed to save data/vote data corrupted."

Kaplan said that while a control number called a public count said that 84 voters had voted on that machine that day, the computer had tallied no results. The public count shows up on the exterior of a machine and keeps tabs on how many ballots have been cast each day. The public count number should match the number of votes recorded on the machine's memory.

Kaplan also said she witnessed a poll worker take the Personal Electronic Ballot cartridge from a nearby machine that was in the process of downloading election data, and the PEB into the malfunctioning machine.

The PEB is used by poll workers to control the machines. It starts up the machines at the beginning of the day. At poll closing time, PEBs are used in machines to download the election results. After the PEB is used to gather all the data, it should contain the results from the precinct.

After the PEB switch, Kaplan said, the poll worker did another computer printout of the results. Both machines showed zero votes.

A county computer specialist was summoned. After several printouts of election results including all machines in the precinct, the final printout showed 84 votes on both machines.

That left significant discrepancies between the signature total for the polling place, the control number showing votes on the machines and the computer printouts of voters.

The machine's manufacturer, Omaha-based Electronic Systems & Software, did not respond to request for comment.

Lynn Kaplan said election workers at Precinct 816 had lots of trouble at the end of the Election Day reconciling the conflicting iVotronic numbers with the total number of signatures. "I shudder to think what goes on in all the other precincts if people aren't keeping up with these things," she said.

The reform coalition's Mahoney said she wants the supervisor of elections' office to investigate what happened that night at Precinct 816.

"It shows a lack of transparency in the system," she said.

The Supervisor of Elections office said it is looking into what happened with Precinct 816 in response to a Daily Business Review request for an explanation.

Mahoney said the situation in Precinct 816 highlights the need for better procedures and training for reconciling signature and ballot totals. She also stressed that the county must investigate discrepancies to see if the resulted from fraud or equipment malfunction.

She noted that unless the numbers are inspected immediately after the election, mistakes would not be caught in time for certification, which must be complete in the 48 hours after the elections.

"It's a very important comparison," Mahoney said. "With electronic voting, how can you be sure you've got the right number of ballots? The benchmark has to be the number of voters that came into the polling place."

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Message

Posted on Wednesday, March 09, 2005 - 12:51 pm:

TUESDAY MAR. 8, 2005: Investigation Update (Submitted to members of the House Judiciary Committee on Mar. 4 and Mar. 8.)

In mid-February, Black Box Voting, together with computer experts and videographers, under the supervision of appropriate officials, proved that a real Diebold system can be hacked.

This was not theoretical or a "potential" vulnerability. Votes were hacked on a real system in a real location using the actual setup used on Election Day, Nov. 2, 2004.

In October, Black Box Voting published an article on this Web site about remote access into the Diebold system. After examining the Diebold software and related internal e-mails, local security professionals were able to demonstrate a hack into a simulated system.

In February, we were allowed to try various hacking techniques into a real election system. To our surprise, the method used in our October simulation did not work.

However, another method did work. The hack that did work was unsophisticated enough that many high school students would be able to achieve it. This hack altered the election by 100,000 votes, leaving no trace at all in the central tabulator program. It did not appear in any audit log. The hack could have been executed in the November 2004 election by just one person.

This hack stunned the officials who were observing the test. It calls into question the results of as many as 40 million votes in 30 states. We are awaiting the response of the House Judiciary Committee to this new development for their investigation.

In another real-world example, Black Box Voting obtained the actual files used in the Nov. 2 election in a specific county. In this situation, the local officials did not know how to run their Diebold system, so a Diebold tech ran the election in that county. Election officials remembered the Diebold tech's first name, but not his last name.

The Diebold tech had gone home after the election, and no one in the county was able to access their own voting system, leading to some consternation because they could not provide our public records request.

Because local officials could not access their logs, we were given permission to sit down and copy files. (We have since found that this is not an isolated problem -- many local officials are painfully unfamiliar with their own voting systems.)

Local officials did not know their password, so Bev Harris asked if they would like her to hack the password. They said "yes" (!)

Later, to our even greater surprise, Bev Harris found that the password set by the Diebold tech on this real election file, used in the Nov. 2004 election was ... drum roll please ... the diabolically clever password: "diebold." (This took only two tries to guess.)

The significance of these two reports is this: By hacking into the central tabulator so easily, we showed that Diebold has not told the truth about the security of its system. Indeed, the software being used in BOTH examples is still extremely vulnerable, with little or no effort made to correct its security flaws.

We have offered to meet with public officials at several different levels to provide more documentation on these problems.

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4-18-2005: Diebold Lobbyist Document...

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| Author admin Board Administrator Username: admin Post Number: 389 Registered: 12-2004 Rating: N/A Votes: 0 (0) | Message Posted on Monday, April 18, 2005 - 09:54 am: <p>Black Box Voting has obtained check stubs showing that Diebold Election Systems appears to have misreported its lobbying fees to Rose & Kindel.</p> <p>Black Box Voting Director Jim March met privately last week with staffers for new California Secretary of State Bruce McPherson, to provide these documents and urge McPherson to remove new appointee Adan Ortega Jr. due to conflict of interest.</p> <p>Ortega has been a senior communications executive at Rose & Kindel. The curious selection of an executive for the Diebold lobbying firm for a position with the office of Secretary of State was noted by the Los Angeles Times, but so far no one has reported the actual amount of money paid by Diebold Election Systems to Rose & Kindel.</p> <p>The reported amount -- over \$100,000 -- shows that Diebold Election Systems has been a major client.</p> <p>However, check stubs obtained by Black Box Voting indicate that Diebold has been paying significantly more for Rose & Kindel lobbying than they reported. From April through June, 2004, Diebold reported only \$7,526 -- yet the check stubs reveal actual payments for May and June alone totalled \$45,248.</p> <p>The Rose and Kindel invoice for May, 2004 was actually \$15,142.87, and the invoice for June 2004 was \$30,105.65. No mathematical manipulation produces a match with any reports filed for 2004.</p> <p>Secretary of State Bruce McPherson has so far ignored complaints from citizens, voting integrity groups, exposure in the press, and documentation showing both significant payments and under-</p> | | | |

reporting the lobbying fees, and Rose & Kindel's executive Ortega remains an appointee for the new McPherson regime.

March, a Republican, had endorsed McPherson as a fair-minded independent thinker. He has called for the resignation of Ortega.

Adan Ortega Jr., senior communications manager for Rose & Kindel (Diebold's main California lobbyist) was appointed by Secretary of State Bruce McPherson as a key staff member for the state of California S.O.S. office.

Two problems:

1. Conflict of interest
2. Failure to properly disclose

DOCUMENTS:

Check Stub: Paid June 2004, \$45,248.53

<http://www.bbvdocs.org/moneytrail/rose-kindel-pymts.pdf>

Summary Worksheet

<http://www.bbvdocs.org/moneytrail/ROSEKINDEL-worksheet.pdf>

Diebold Lobbyist Payment Disclosure Documents:

Quarter 1 2002: Missing

Quarter 2 2002: \$10,000

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-apr-jun02.pdf>

Quarter 3 2002: \$15,020

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-jul-sep02.pdf>

Quarter 4 2002: Missing

Quarter 1 2003: Missing

Quarter 2 2003: Missing

Quarter 3 2003: \$7,500 <http://www.bbvdocs.org/moneytrail/rose-kindel-rept-jul-sep03.pdf>

Quarter 4 2003: \$22,560

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-oct-dec03.pdf>

Quarter 1 2004: \$15,000

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-jan-mar04.pdf>

Quarter 2 2004: \$7,526.55

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-apr-jun04.pdf>

Quarter 3 2004: \$30,766.66

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-jul-sep04.pdf>

Quarter 4 2004: \$10,000

<http://www.bbvdocs.org/moneytrail/rose-kindel-rept-oct-dec04.pdf>

News articles confirming Ortega's role at Rose & Kindel:

2 March 2005

The Orange County Register

... Adan Ortega Jr., 42... a senior communications-management adviser with GCG Rose & Kindel, ..

1 March 2005

US Fed News

SACRAMENTO, Calif., March 1 -- ... **Adan Ortega Jr., 42, of Fullerton, is senior communications management adviser with GCG Rose & Kindel.** Previously, he was vice president of external affairs at Metropolitan Water District of Southern California.

17 March 2005

Los Angeles Times

Home Edition

SACRAMENTO

... McPherson's advisory team also includes Adan Ortega Jr., a former deputy secretary of state ... advisors include ... **Adan Ortega Jr., a former deputy secretary of state who is now a member of the lobbying firm that represents Diebold Election Systems.**

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Corporate Control of Voting Equipment Certification

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By John Gideon

June 02, 2005

How Did The Sequoia VeriVote Printer System Get Qualified And Then Certified In California?

The voting systems qualification and certification process is broken. The vendors appear to manipulate the system in order to be certified by an Independent Testing Authority (ITA). A quick look at the voting systems that have been qualified this year shows that a vast majority of the hardware and firmware is or certified to the 1990 standards; while some of the software has been qualified to the newer and more stringent 2002 standards. This process of qualification seems to be almost capricious, as though it is done to the benefit of the vendors.

A good example of this broken process is seen in the events surrounding the qualification and certification of the new Sequoia VeriVote vvpap printer. Sequoia developed this new add-on to their Sequoia AVC Edge electronic voting machine under pressure from the state of Nevada. The new printer was qualified, as part of a complete system, by an ITA, and the National Association of State Elections Directors (NASED) gave Sequoia its "System ID Number" on October 24, 2004.

The problem is that there are not now, and never have been, any standards developed by the Federal Elections Commission or the Technical Guidelines Development Committee for qualifying a vvpap printer. And, instead of turning to the newer, more stringent, 2002 standards, Sequoia chose to qualify their printer system hardware and firmware to the older 1990 standards.

Below is a snapshot of the NASED qualification details for the Sequoia voting system that includes the VeriVote Printer. Notice that the WinEDS software is qualified to 2002 standards but the voting system itself is only qualified to the 1990 standards.

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| Sequoia | WinEDS version 3.0.134 | WinEDS version 3.0.134 (2002) | Sequoia (Optech) 400C Scanner/Tabulator, Firmware version 1.02b Sequoia AVC Edge Model II version 4.2a. & 4.3.320 w. VeriVote Printer# Sequoia AVC Edge Model I version 4.10.4.2a. & 4.3.307 Sequoia AVC Advantage, version 9.00G Sequoia AVC Advantage, version 8.00B | N-1-07-22-11-006 (1990) | 10/20/2004 |
|---------|------------------------|----------------------------------|--|----------------------------|------------|

Brian Hancock is the ITA Secretariat for NASED; so I sent Mr. Hancock an email and asked, "From the snap-shot of the applicable portion of the qualification list, can you tell me what standards were used to do that qualification? Is it qualified to 2002 or 1990 standards? Also, and more specifically, what standards are in effect for the qualification of VVPAT printers?"

Mr. Hancock responded to my email with the following:

"NASED Qualified the Sequoia voting system containing the VeriVote printer to the 1990 VSS. As you can see in your snapshot, some portions of the system (such as the software) were tested to the 2002 VSS, but until all portions of a system are fully 2002 compliant, the system retains a 1990 qualification. As you know, the 2002 VSS contained no requirements for VVPAT devices. The test labs could therefore only test these products against the manufacturers specifications, and to make sure the product interfaced properly with the rest of the voting system."

So, the vendor, the ITA hired by the vendor, and NASED have all qualified a new vvpap printer that will be used on voting machines across the country — **without testing it against any standards designed for vvpap printers**. The VeriVote printer is being regarded as a valid method of providing a voter verified paper ballot for voters who vote on the Sequoia AVC Edge voting machine. This printer is also now the big selling point for Sequoia as they attempt to satisfy the states that require a vvpap.

But wait! There is more. Remember that the EAC is the keeper of the Help America Vote Act of 2002

(HAVA). They have overall responsibility, via NASED, for ensuring systems meet the federal standards as well as ensuring that all systems comply with HAVA.

HAVA Section 301(a)(3) states that "the voting system shall be accessible for individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters."

In a **Department of Justice finding**, Sheldon Bradshaw, a Deputy Assistant Attorney General in the Office of Legal Counsel, found that (highlighting added):

"A direct recording electronic voting system that produces a contemporaneous paper record, which is not accessible to sight-impaired voters but which allows sighted voters to confirm that their ballots accurately reflect their choices before the system officially records their votes, would be consistent with the Help America Vote Act and with Title II of the Americans with Disabilities Act, **so long as the voting system provides a similar opportunity for sight-impaired voters to verify their ballots before those ballots are finally cast.**"

So, we know that disabled voters must have the same ability to verify their votes as non-disabled voters. This is law in HAVA and is agreed to by the Attorney General of the United States.

Why is this important? On January 14, 2005 the state of California refused to immediately certify the Sequoia VeriVote printer for use. Why? The Secretary of State's Elections Division found that the Sequoia VeriVote printer did not meet the state's "Accessible Voter Verified Paper Audit Trail" standards, and **stated the following** (highlighting added):

"There are still two issues where state testing of the VeriVote found that the system failed to meet California's AVVPAT standards.

"1. Section 2.4.3.1.2 requires that "The data relayed to the audio device must come either directly from the data sent to the printer or directly from the paper record copy." However, the audio stream used by the AVC Edge with the VeriVote comes directly from the DRE and is the same data stream used during the rest of the audio voting. Therefore, under this configuration, **voters using the audio function would still be dependant on federal, state and local testing to verify whether their vote was recorded accurately.**

"... The Voting Systems and Procedures Panel would have to modify the standards or grant an exemption on these items prior to a staff recommendation that the system be certified."

There are two shocking issues here. First, and most important, the Secretary of State's Elections Division clearly found that because the audio feed for blind voters does not come from the printer, or directly from the feed to the printer, blind voters do not have the same opportunity to verify their votes as do sighted voters. This is a clear violation of HAVA and does not meet the requirements stated in the Department of Justice finding. How did this printer get qualified by NASED if it violates the law? Simple. **The vvpap capabilities weren't tested against any vvpap standards.**

Second, and nearly as important, within one week the California Election Division did exactly what they suggested they might. They modified their standards and certified the Sequoia VeriVote printer. Essential they turned their backs on federal law in order to allow Sequoia to sell its system in the state.

Presently a committee chartered and sponsored by the EAC and under the auspices of NIST is finalizing a new set of federal guidelines that will include standards for a vvpap printer. We should not expect that these new standards will be any more comprehensive or stringent than the 1990 and 2002 standards. In fact the **vendors have had a hand in writing those standards.**

What is clear is that the testing and certification system is set up in the interest of the vendors, and the public interest takes a backseat. It is even to the point where federal and state governments are willing to allow the vendors to violate the law just so they can sell their wares. The Sequoia VeriVote printer system is clearly in violation of the law and should not be used until the source of the audio ballot-verification is taken from the printer itself.

Instead of forcing the vendor to make a good product, those who are supposed to be ensuring the public interest, are turning their backs on the public. The vendors are being allowed to sell voting systems that clearly do not meet the law and they are being allowed to do this by all of those who are supposed to be

ensuring that the public interest is protected - the ITAs, NASED, one EAC, and the State.

Herald.com

Posted on Thu, Feb. 03, 2005

Printer fails to satisfy e-vote activists

RACHEL KONRAD
Associated Press

SAN JOSE, Calif. - Three months after the presidential election, one of the nation's biggest makers of touch-screen voting machines has created a companion printer that spits out paper records.

The prototype that Diebold Inc. is now touting is exactly what some critics of the ATM-like machines have been demanding for several years.

Even so, paper records alone are not enough to satisfy computer scientists who say transparency in the electronic machines' design and software must complement paper backups.

The Diebold prototype seeks to reassure voters by displaying their selections under a piece of glass or plastic alongside the touch-screen machine. If they spot a problem, they can cancel the ballot and start over. And while voters can't touch the paper records, elections officials will be able to use them to verify close elections.

"Results in the last election reflected the accuracy and security of the (paperless) system," said Diebold spokesman David Bear. "But the fact of the matter is, there are some states that are demanding printers."

After months of criticism by computer scientists that electronic voting systems are unreliable, California and Illinois recently passed laws requiring a paper trail for electronic ballots, and at least 20 other states have considered similar legislation.

Critics of North Canton, Ohio-based Diebold say the AccuView Printer Module is a step in the right direction but doesn't address the potential for buggy software or malfunctioning hardware that could misrecord votes or expose voting systems to hackers, deletions or other disasters.

The printers are only valuable to the extent that counties use them, and critics worry that county elections officials with tight budgets may not opt for them.

Computer scientists also are concerned that the handful of private laboratories licensed to certify voting equipment, including the printer module, still operate in secret and without any federal guidelines.

"It's a very, very small step forward in terms of security of elections," said Avi Rubin, technical director of the Information Security Institute of Johns Hopkins University and co-author of a scathing report on Diebold machines.

Like many computer scientists, he thinks paperless voting systems should be banned.

"I'd say a Diebold machine with a paper trail is better than a Diebold machine without a paper trail, but that's as positive I can be about it," Rubin said.

Diebold stock price rose sharply in the months after the presidential election, when the machines fared far better than critics had predicted. But executives warned investors last week not to expect more dramatic improvements from its voting equipment division. The company's stock hit a 52-week high of \$57.75 in mid-January, and closed at \$54.91 on Thursday.

About 40 million Americans cast electronic ballots during the Nov. 2 election, but only 2,600 touch screens in Nevada - made by Oakland, Calif.-based Sequoia Voting Systems Inc. - and a few other prototypes around the country produced paper records.

Some of the paperless systems were blamed for high-profile failures in November that included these:

_ In Carteret County, N.C., where paperless machines failed to retain 4,438 votes during early voting, one Democratic incumbent lost by 2,287 votes out of about 3 million cast, and election administrators had to conduct a special election in early January to determine the next agriculture commissioner.

_ About three dozen voters in six states complained that they tried to select Democrat John Kerry, but the touch screens showed them as having voted for President Bush until they revised their ballot. Equipment manufacturers blamed miscalibration.

_ And in a Franklin County, Ohio, a precinct where 638 voters cast ballots in the presidential election, a computer recorded 3,893 extra votes for President Bush. The error was corrected in the certified vote total.

Even with the printer, breakdowns and paper jams are possible, said Stanford University computer scientist David Dill, a leading touch-screen critic.

Others say printers only compound the complexity of the nation's patchwork of voting systems. Counties must pick from hundreds of models of voting equipment, maintenance contracts, software and hardware upgrades, consulting services and other add-ons.

Because no federal agency enforces certification standards, one voter advocacy group is creating a Consumer Reports-style ranking for voting equipment.

The Voting Systems Performance Rating would create standards and assign grades on such factors as reliability, security, privacy and accessibility for the visually impaired. States and counties could use such rankings to help them decide which products to purchase.

"You can't solve the voting problem unless you have a totally transparent mechanism to evaluate," said a founding member, David Chaum, a Los Angeles cryptographer. "In order to crack this voting systems nut, you have to do it in the broad light of day."

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The New Diebold Printers

by John Gideon*

Diebold Election Systems has begun showing its new voter verified paper record printer to election officials around the country. The new system is still not qualified by an Independent Testing Authority approved by the EAC.

This new system consists of a thermal printer that attaches to the Diebold AccuVote TSX touch-screen voting machine. The voter has the ability to look at a paper printout of the vote in the printer and verify that record before finalizing their vote; or so the company says. This add-on printer satisfies many states voter verified paper trail requirement.

A closer examination of this device, as described in news articles, shows that the paper record is actually on a 290 foot roll of thermal paper. The printing on the ballot is so small that when the voter looks at the record to verify it, they are looking through a magnifying piece of plastic.

Are these problems? Is there a better solution?

My first question was about the thermal paper. I wrote a reporter for the Akron Beacon Journal, Stephen Dyer, who wrote an article on this new printer. I questioned the thermal paper and whether it would preserve the ballots for the 22 months that are required by federal law. His response back was, "It's on 15lb. paper that's supposed to hold off longer than dot-matrix printing....." Being a bit skeptical I then called a large supplier of thermal paper products and asked if there was anything special about 15lb. Thermal paper. The sales person told me that all thermal paper is 15lb.

I then asked the sales person to tell me if she would feel comfortable storing federal records on thermal paper for any length of time. Her response was that records on thermal paper can last 5 to 7 years. That is hardly as long as records printed by a dot-matrix printer but longer than I suspected. She then qualified her statement by telling me that everything depended on those records being kept away from light sources and heat during storage and a lack of handling.

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Pennsylvania and the
UniLect Patriot Decision

The Carter-Baker Election Commission: Will Corporate Conflicts of Interest Make Facing the Problems of Paperless E-Voting Possible?

Do DREs with Paper Ballots Discriminate Against Disabled Voters?

Carter Gets It – But Will His Electoral Commission?

County Officials Praise the UniLect Patriot: A Comparison of Words with Facts

Georgia's "Model" Election Management System

So, instead of paper ballots that can be stored anywhere secure we are now going to be asked to allow records of our ballots to be printed on thermal paper that must have special storage.

Also a problem with this new system is the fact that all records are printed, in the order that they were cast, on a single roll of paper. If anyone wanted to match ballots to voters who cast those ballots this system simplifies that task. The right to the secrecy of the vote is under attack when these machines are used.

Finally, many state's voter verified paper record laws state that the records must be human readable or readable by the voter without the use of another device. This would include the use of a magnifying glass. The fact that the printing on the paper record is so small that it requires a magnifying glass to read it is certainly problematic especially when you consider that those ballots must be read during audits and/or recounts.

Many states that are requiring the printing of a voter verified paper record or ballot, are doing so because they realize that there must be some means exterior of the machine's software to audit the machines. These paper records are to be that vehicle to an accurate audit. The printing of these ballots on thermal paper, on a single roll, in print that is too small to be seen with the naked eye and in a non-machine readable format does not allow easy auditability. It seems that Diebold is throwing more obstructions into the way of auditing elections and doing less to ensure fair, transparent, auditable elections.

Not wanting to throw up my hands and point out problems without having solutions, here is my solution. Diebold has only to add a serial port to their voting machines to allow an off-the-shelf printer to be used for printing the paper records. They can add some extra software that will enable the printer and direct the printer to print the record before the voter pushes the final "Vote" button.

Counties can then contract with a computer supply house to buy enough printers to equip their machines. Those printers would be much cheaper than Diebold will be charging for their printer and they would use regular printer paper that can be bought by the pallet from any paper supplier or from Costco.

My solution is probably too easy; but why does this all have to be so hard?

John Gideon is the Information Manager for VoteTrustUSA and for VotersUnite.Org.

Our website is currently under development. Our new face will be launched soon.

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Optical scan system hacked

Black Box Voting Forums » Latest Consumer Reports from Black Box Voting » 5-27-05:
Optical scan system hacked (3 ways) - BBV Exclusive

Posted on Friday, May 27, 2005 - 05:03 pm:

Tallahassee, FL: "Are we having fun yet?"

This is the message that appeared in the window of a county optical scan machine, startling Leon County Information Systems Officer Thomas James. Visibly shaken, he immediately turned the machine off.

Diebold's opti-scan (paper ballot) voting system uses a curious memory card design, offering penetration by a lone programmer such that standard canvassing procedures cannot detect election manipulation.

The Diebold optical scan system was used in about 800 jurisdictions in 2004. Among them were several hotbeds of controversy: Volusia County (FL); King County (WA); and the New Hampshire primary election, where machine results differed markedly from hand-counted localities.

New regs: Counting paper ballots forbidden

Most states prohibit elections officials from checking on optical scan tallies by examining the paper ballots. In Washington, Secretary of State Sam Reed declared such spontaneous checkups to be "unauthorized recounts" and prohibited them altogether. New Florida regulations will forbid counting paper ballots, even in recounts, except in highly unusual circumstances. Without paper ballot hand-counts, the hacks demonstrated below show that optical-scan elections can be destroyed in seconds.

A little man living in every ballot box

The Diebold optical scan system uses a dangerous programming methodology, with an executable program living inside the electronic ballot box. This method is the equivalent of having a little man living in the ballot box, holding an eraser and a pencil. With an executable program in the memory card, no Diebold opti-scan ballot box can be considered "empty" at the start of the election.

The Black Box Voting team proved that the Diebold optical scan program, housed on a chip inside the voting machine, places a call to a program living in the removable memory card during the election. The demonstration also showed that the executable program on

the memory card (ballot box) can easily be changed, and that checks and balances, required by FEC standards to catch unauthorized changes, were not implemented by Diebold -- yet the system was certified anyway.

The Diebold system in Leon County, Florida succumbed to multiple attacks.

Ion Sancho: Truth and Excellence in Elections

Leon County Elections Supervisor Ion Sancho and Information Systems Officer Thomas James had already implemented security procedures in Leon County far exceeding the norm in elections management. This testing, done by a team of researchers including Black Box Voting, independent filmmakers, security expert Dr. Herbert Thompson, and special consultant Harri Hursti, was authorized by Mr. Sancho, in an unusual act of openness and courage, to identify any remaining holes in Leon County's election security.

The results of the memory card hack demonstration will assist elections supervisors throughout the U.S., by emphasizing the critical importance of accounting for each and every memory card and protecting access.

Findings:

Computer expert Harri Hursti gained control over Leon County memory cards, which handle the vote-reporting from the precincts. Dr. Herbert Thompson, a security expert, took control of the Leon County central tabulator by implanting a trojan horse-like script.

Two programmers can become a lone programmer, says Hursti, who has figured out a way to control the entire central tabulator by way of a single memory card swap, and also how to make tampered polling place tapes match tampered central tabulator results. This more complex approach is untested, but based on testing performed May 26, Hursti says he has absolutely no reason to believe it wouldn't work.

Three memory card tests demonstrated successful manipulation of election results, and showed that 1990 and 2002 FEC-required safeguards are being violated in the Diebold version 1.94 opti-scan system.

Three memory card hacks

1. An altered memory card (electronic ballot box) was substituted for a real one. The optical scan machine performed seamlessly, issuing a report that looked like the real thing. No checksum captured the change in the executable program Diebold designed into the memory card.
2. A second altered memory card was demonstrated, using a program that was shorter than the original. It still worked, showing that there is also no check for the number of bytes in the program.

3. A third altered memory card was demonstrated with the votes themselves changed, showing that the data block (votes) can be altered without triggering any error message.

How to "Roll over the odometer" in Diebold optical scan machines

Integer overflow checks do not seem to exist in this system, making it possible to stuff the ballot box without triggering any error message. This would be like pre-loading minus 100 votes for Tom and plus 100 votes for Rick ($-100+100=\text{ZERO}$) -- changing the candidate totals without changing the overall number of votes.

A more precise comparison would be this: The odometer on a car rolls over to zero after 999,999. In the Diebold system tested, the rollover to zero happens at 65,536 votes. By pre-loading 65,511 votes for a candidate, after 25 real votes appear ($65,511 \text{ plus } 25 = 65,536$) the report "rolls over" so that the candidate's total is ZERO.

This manipulation can be balanced out by preloading votes for candidate "A" at 65,511 and candidate "B" at 25 votes -- producing an artificial 50-vote spread between the candidates, which will not be obvious after the first 25 votes for candidate "A" roll over to zero. The "negative 25" votes from the odometer rollover counterbalance the "plus 25" votes for the other candidates, making the total number of votes cast at the end of the day exactly equal to the number of voters.

While testing the hack on the Leon County optical scan machine, Hursti was stunned to find that pre-stuffing the ballot box to "roll over the odometer" produced no error message whatsoever.*

*We did not have the opportunity to scan ballots after stuffing the ballot box. Therefore, the rollover to zero was not tested in Leon County. This integer overflow capability is discernable in the program itself. We did have the opportunity to test a pre-stuffed ballot box, which showed that pre-loaded ballot boxes do not trigger any error message.

Simple tweaks to pass L&A test and survive zero tape

Though the additional tweaks were not demonstrated at the Leon County elections office, Hursti believes that the integer overflow hack can be covered up on the "zero tape" produced at the beginning of the election. The programming to cover up manipulations during the "logic & accuracy test" is even simpler, since the program allows you to specify on which reports (and, if you like, date and time of day) the manipulation will affect.

The testing demonstrated, using the actual voting system used in a real elections office, that Diebold programmers developed a system that sacrifices security in favor of dangerously flexible programming, violating FEC standards and calling the actions of ITA testing labs and certifiers into question.

In the case of Leon County, inside access was used to achieve the hacks, but there are numerous ways to introduce the hacks without inside access. Outside access methods will be described in the technical report to be released in mid-June.

Security concerns

Putting an executable program into removable memory card "ballot boxes" -- and then programming the opti-scan chip to call and invoke whatever program is in the live ballot box during the middle of an election -- is a mind-boggling design from a security standpoint. Combining this idiotic design with a program that doesn't even check to see whether someone has tampered with it constitutes negligence and should result in a product recall.

Counties that purchased the Diebold 1.94 optical scan machines should not pay for any upgraded program; instead, Diebold should be required to recall the faulty program and correct the problem at its own expense.

None of the attacks left any telltale marks, rendering all audits and logs useless, except for hand-counting all the paper ballots.

Is it real? Or is it Memorex?

For example, Election Supervisor Ion Sancho was unable to tell, at first, whether the poll tape printed with manipulated results was the real thing. Only the message at the end of the tape, which read "Is this real? Or is it Memorex?" identified the tape as a tampered version of results.

In another test, Congresswoman Corrine Brown (FL-Dem) was shocked to see the impact of a trojan implanted by Dr. Herbert Thompson. She asked if the program could be manipulated in such a way as to flip every fifth vote.

"No problem," Dr. Thompson replied.

"It IS a problem. It's a PROBLEM!" exclaimed Brown, whose district includes the troubled Volusia County, along with Duval County -- both currently using the Diebold opti-scan system.

This system is also used in Congressman John Conyers' home district, in contentious King County, Washington, and in Lucas County, Ohio (where six election officials resigned or were suspended after many irregularities were found.)

Diebold optical scans were used in San Diego for its ill-fated mayoral election in Nov. 2004.

Optical scan systems have paper ballots, but election officials are crippled in their ability to hand count these ballots due to restrictive state regulations and budget limitations.

The canvassing (audit) procedure used to certify results from optical scan systems involves comparing the "poll tapes" (cash register-like results receipts) with the printout from the central tabulator. These tests demonstrate that both results can be manipulated easily and quickly.

Minimum requirements to perform this hack:

1. A single specimen memory card from any county using the Diebold 1.94 optical scan series. (These cards were seen scattered on tables in King County, piled in baskets accessible to the public in Georgia, and jumbled on desktops in Volusia county.)
2. A copy of the compiler for the AccuBasic program. (These compilers have been fairly widely distributed by Diebold and its predecessor company, and there are workarounds if no compiler is available.)
3. Modest working language of any one of the higher level computer languages (Pascal, C, Cobol, Basic, Fortran...) along with introductory-level knowledge of assembler or machine language. (Machine language knowledge needed is less than an advanced refrigerator or TV repairmen needs. The optical scan system is much simpler than modern appliances).

The existence of the executable program in the memory card was discernable from a review of the Diebold memos. The test hacks took just a few hours for Black Box Voting consultants to develop.

Nearly 800 jurisdictions conducted a presidential election on this system. This system is so profoundly hackable that an advanced-level TV repairman can manipulate votes on it.

Black Box Voting asked Dr. Thompson and Hursti to examine the central tabulator and the optical scan system after becoming concerned that not enough attention had been paid to optical scans, tabulators and remote access.

Thompson and Hursti each found the vulnerabilities for their respective hacks in less than 24 hours.

"Open for Business"

When it comes to this optical-scan system, as Hursti says, "It's not that they left the door open. There is no door. This system is 'open for business.'"

The question now is: How brisk has business been? Based on this new evidence, it is time to sequester and examine the memory cards used with Diebold optical scans in Nov. 2004.

The popularity of tamper-friendly machines that are "open for business" in heavily Democratic areas may explain the lethargy with which Democratic leaders have been approaching voting machine security concerns.

The enthusiasm with which Republicans have endorsed machines with no paper ballots at all indicates that neither party really wants to have intact auditing of elections.

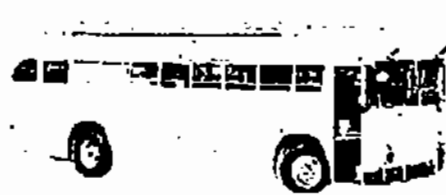
The ease with which a system -- which clearly violates dozens of FEC standards going back to 1990 -- was certified calls into question the honesty, competence, and personal financial transactions of both testing labs and NASED certifiers.

Revamp and update hand-counted paper ballot technology?

Perhaps it is time to revisit the idea of hand-counted paper ballots, printed by machines for legibility, with color-coded choices for quick, easy, accurate sorting and counting. We should also take another look at bringing counting teams in when the polls close, to relieve tired poll workers.

This report is the "non-techie" version of a longer report, to be made available around mid-June, with more technical information.

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SOLAR BUS

Election Justice Center

Your home for updated information on the fight for democracy in America

Diebold employee donations to the 2004 Presidential C

Contributions to George W. Bush

BUCCI, DAVID MR
HUDSON, OH 44236
DIEBOLD INC./SENIOR VICE PRESIDENT
6/26/2003
\$2,000
Bush, George W

CROWTHER, JOHN M MR
CANTON, OH 44708
DIEBOLD INC./VICE PRESIDENT
8/27/2003
\$2,000
Bush, George W

D' AMICO, THOMAS R MR
CANTON, OH 44718
DIEBOLD INC./EXECUTIVE
9/3/2003
\$2,000
Bush, George W

FRAZZITTA, BART MR
AKRON, OH 44333
DIEBOLD INC./VICE PRESIDENT
6/26/2003
\$1,000
Bush, George W

FRAZZITTA, BART MR
AKRON, OH 44333
DIEBOLD INC./VICE PRESIDENT
9/29/2003
\$1,000
Bush, George W

GESWEIN, GREGORY T MR
BENTLEYVILLE, OH 44022
DIEBOLD INC./CHIEF FINANCIAL OFFICE

Contributions to John F. Kerry

KELLEHER, DIANNE
PITTSBURGH, PA 15208
DIEBOLD INVESTMENT/PRESIDENT
4/16/2004, 6/30/2004
\$500 (total)
Kerry, John

Obvious Questions

What are the chances that by random chance executives of a non-political organization would the same candidate, and only one would contribute? (Not to mention the amount - 50 times more than the average person would contribute.)

What happened on 6/26/03 and 8/27/03 that prompted the Diebold executives to donate money to the candidates?

6/26/2003
\$2,000
Bush, George W

HILLOCK, JENNIFER L MRS
MASSILLON, OH 44646
DIEBOLD INC./INT'L BUSINESS EXECUTI
8/27/2003
\$2,000
Bush, George W

HILLOCK, MICHAEL J MR
MASSILLON, OH 44646
DIEBOLD INTERNATIONAL INC./PRESIDEN
6/26/2003
\$2,000
Bush, George W

INGRAM, LARRY D MR
MASSILLON, OH 44646
DIEBOLD INC./VICE PRESIDENT OF GLOB
6/26/2003
\$1,000
Bush, George W

INGRAM, LARRY D MR
MASSILLON, OH 44646
DIEBOLD INC./VICE PRESIDENT OF GLOB
9/15/2003
\$1,000
Bush, George W

O' DELL, WALDEN W MR
CANTON, OH 44708
DIEBOLD INC./CHAIRMAN
6/12/2003
\$4,000
Bush, George W

O' DELL, WALDEN W MR
CANTON, OH 44708
DIEBOLD INC./CHAIRMAN
8/8/2003
(\$2,000)
Bush, George W

SCHEURER, CHARLES B MR
CANTON, OH 44708
DIEBOLD INC./VICE PRESIDENT
8/27/2003
\$2,000
Bush, George W

SWIDARSKI, THOMAS W MR
HUDSON, OH 44236
DIEBOLD INC./VICE PRESIDENT
7/9/2003
\$2,000

Bush, George W

VAN CLEVE, JEFFREY J MR
CANTON, OH 44720
DIEBOLD CREDIT CORPORATION/VICE PRE
9/3/2003
\$1,000
Bush, George W

VAN CLEVE, JEFFREY J MR
CANTON, OH 44720
DIEBOLD CREDIT CORPORATION/VICE PRE
6/26/2003
\$500
Bush, George W

Source: opensecrets.org

For more information on election fraud, see the Solar Bus Election Justice Center

0330

Herald.com

Posted on Wed, Sep. 01, 2004

Solano County pays \$415,000 to get out of e-voting contract

Associated Press

FAIRFIELD, Calif. - Solano County paid \$415,000 to get out of a contract with voting equipment manufacturer Diebold Inc., and county officials will instead buy \$4.2 million in new equipment from a rival company.

Deputy County Counsel Wendy Getty said the county reached a settlement Aug. 16 with Diebold. The North Canton, Ohio-based company installed nearly 1,200 paperless touchscreen voting machines throughout the county after winning the contract in 2002.

The county was one of dozens across the country that opted for electronic ballots to avoid problems with "hanging chads" that plagued the 2000 presidential election.

But in May, California Secretary of State Kevin Shelley banned the type of machines used in Solano and three other counties after discovering uncertified software and other problems that potentially "jeopardized" the outcomes of the March presidential primary and other elections. Computer scientists had alerted state officials of serious security breaches with the paperless system, which does not include printers and does not produce paper records suitable for a recount in case of a contested election.

After the secretary of state's discovery, Solano County voter registrar Laura Winslow, a staunch defender of touchscreen voting systems, resigned.

Last week, the county sent about \$4 million worth of Diebold Accu-Vote TSx machines back to a company office in McKinney, Texas. Diebold offered to replace the banned machines for free with its own optical-scan systems, which include a paper ballot.

County officials rejected the offer, opting to buy new equipment from Diebold rival Election Systems & Software Inc. for nearly \$4.2 million, Solano County Chief Information Officer Ira Rosenthal told the Fairfield-Suisun City Daily Republic.

Solano County residents will use ES&S optical-scan equipment in November.

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Democracy Fails: Corporations Win

Michael Miller, Saturday, December 25, 2004

Democracy Fails: Corporations Win

By Peter Phillips, Project Censored, November 2004

Democracy in the United States is only a shadow in a corporate media cave of deceit, lies and incomplete information. We stand ignorant of what the powerful are doing in our name and how the corporate media ignores key issues affecting us all.

A young professional couple from San Diego stated the weekend before the election, "we don't think voting will make any difference so why bother?" Over 80 million eligible voters joined them by refusing to participate in the most recent election. While having been a voter for 35 years, I can't fault them for their logic. November 2 gave us a choice between war and more war, corporate globalization and more corporate globalization, the continuation of gifting billions of dollars to Israel, the Patriot Act and an expanded Patriot Act, a police state and an seriously growing police state, media monopoly and even bigger media monopolies, and wealth inequality or an even greater wealth divide. With the only alternative to these issues being minor candidates without a snowball's chance, for many voting seemed meaningless.

The issues where a choice was offered, abortion, Social Security, and medical care, were so under-covered by the corporate media that most voters still don't understand the differences. Voting ended up being a faith-based decision embedded on visceral reactions to individuals instead of key societal issues.

The real winners November 2 are the military industrial complex, who will continue to feed at the 500 billion-dollar military trough and the corporate media, whose coffers were filled with billions of dollars for campaign ads.

And can we be sure we actually had a fair election among those who did vote? Election Systems & Software (ES&S), Diebold, and Sequoia are the companies primarily involved in implementing the new voting stations throughout the country. All three have strong ties to the Bush Administration. The largest investors in ES&S, Sequoia, and Diebold are government defense contractors Northrup-Grumman, Lockheed-Martin, Electronic Data Systems (EDS) and Accenture. Diebold hired Scientific Applications International Corporation (SAIC) of San Diego to develop the software security in their voting machines. A majority of officials on SAIC's board are former members of either the Pentagon or the CIA including:

- Army Gen. Wayne Downing, formerly on the National Security Council
- Bobby Ray Inman; former CIA Director
- Retired Adm. William Owens, former vice chairman of the Joint Chiefs of Staff
- Robert Gates, another former director of the CIA.

So we have a CIA/military private firm that programmed the security in the voting machines for companies owned by some of the largest military contracts in the country. No wonder the Co-founder of the Citizens Alliance for Secure Elections, Susan Truitt said November 3: "Seven counties in Ohio have electronic voting machines and none of them have paper trails. That alone raises issues of accuracy and integrity as to how we can verify the count. A recount without a paper trail is meaningless; you just get a regurgitation of the data. Last year, Blackwell tried to get the entire state to buy new machines without a paper trail. The exit polls, virtually the only check we have against

tampering with a vote without a paper trail, had shown Kerry with a lead. ... A poll worker told me this morning that there were no tapes of the results posted on some machines; on other machines the posted count was zero, which obviously shouldn't be the case."

Our level of non-participation really means democracy has failed in the US. Democracy is the people making decisions about the important issues in their lives. Freedom is the ability to act on these decisions. Without an electoral choice democracy is non-existent and freedom only means the right to choose your own brand of toothpaste. Without an active independent media informing on the powerful we lack both freedom and democracy.

Peter Phillips is a Professor of Sociology at Sonoma State University and Director of Project Censored. For a listing of current censored news stories see <http://www.projectcensored.org/>

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Columns

Bob Fitrakis

Diebold, electronic voting and the vast right-wing conspiracy

February 24, 2004



The Governor of Ohio, Bob Taft, and other prominent state officials, commute to their downtown Columbus offices on Broad Street. This is the so-called "Golden Finger," the safe route through the majority black inner-city near east side. The Broad Street BP station, just east of downtown, is the place where affluent suburbanites from Bexley can stop, gas up, get their coffee and New York Times. Those in need of cash visit BP's Diebold manufactured CashSource+ ATM machine which provides a paper receipt of the transaction to all customers upon request.

Many of Taft's and President George W. Bush's major donors, like Diebold's current CEO Walden "Wally" O'Dell, reside in Columbus' northwest suburb Upper Arlington. O'Dell is on record stating that he is "committed to helping Ohio deliver its electoral votes to the President" this year. On September 26, 2003, he hosted an Ohio Republican Party fundraiser for Bush's re-election at his Cotswold Manor mansion. Tickets to the fundraiser cost \$1000 per couple, but O'Dell's fundraising letter urged those attending to "Donate or raise \$10,000 for the Ohio Republican Party."

According to the Columbus Dispatch: "Last year, O'Dell and his wife Patricia, campaigned for passage of two liquor options that made their portion of Tremont Road wet.

On November 5, Upper Arlington residents narrowly passed measures that allowed fundraising parties to offer more than beer, even though his 10,800-square-foot home is a residence, a permit is required because alcohol is included in the price of fundraising tickets. O'Dell is also allowed to serve "beer, wine and mixed drinks" at Sunday fundraisers.

O'Dell's fund-raising letter followed on the heels of a visit to President Bush's Crawford Texas ranch by "Pioneers and Rangers," the designation for people who had raised \$100,000 or more for Bush's re-election.

If Ohio's Republican Secretary of State Kenneth Blackwell has his way, Diebold will receive a contract to supply touch screen electronic voting machines for much of the state. None of these Diebold machines will provide a paper receipt of the vote.

Diebold, located in North Canton, Ohio, does its primary business in ATM and ticket-vending machines. Critics of Diebold point out that virtually every other machine the company makes provides a paper trail to verify the machine's calculations. Oddly, only the voting machines lack this essential function.

State Senator Teresa Fedor of Toledo introduced Senate Bill 167 late last year mandating that every voting machine in Ohio generate a "voter verified paper audit trail." Secretary of State Blackwell has denounced any attempt to require a paper trail as an effort to "derail" election reform. Blackwell's political career is an interesting one: he emerged as a black activist in Cincinnati supporting municipal charter reform, became an elected Democrat, then an Independent, and now is a prominent Republican with his eyes on the Governor's mansion.

Voter fraud

A joint study by the California and Massachusetts Institutes of Technology following the

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2000 election determined that between 1.5 and 2 million votes were not counted due to confusing paper ballots or faulty equipment. The federal government's solution to the problem was to pass the Help America Vote Act (HAVA) of 2002.

One of the law's stated goals was "Replacement of punch card and lever voting machines." The new voting machines would be high-tech touch screen computers, but if there's no paper trail, how do you know if there's been a computer glitch? How can the results be trusted? And how do you recount to see if the actual votes match the computer's tally?

Bev Harris, author of *Black Box Voting: Ballot Tampering in the 21st Century*, argues that without a paper trail, these machines are open to massive voter fraud. Diebold has already placed some 50,000 machines in 37 states and their track record is causing Harris, Johns Hopkins University professors and others great concern.

Johns Hopkins researchers at the Information Security Institute issued a report declaring that Diebold's electronic voting software contained "stunning flaws." The researchers concluded that vote totals could be altered at the voting machines and by remote access. Diebold vigorously refuted the Johns Hopkins report, claiming the researchers came to "a multitude of false conclusions."

Perhaps to settle the issue, apparently an insider leaked documents from the Diebold Election Systems website and posted internal documents from the company to Harris' website. Diebold went to court to stop, according to court records, the "wholesale reproduction" of some 13,000 pages of company material.

The Associated Press reported in November 2003 that: "Computer programmers, ISPs and students at [at] least 20 universities, including the University of California, Berkeley, and the Massachusetts Institute of Technology received cease and desist letters" from Diebold. A group of Swarthmore College students launched an "electronic civil disobedience" campaign to keep the hacked documents permanently posted on the Internet.

Harris writes that the documents expose how the mainstream media reversed their call projecting Al Gore as winner of Florida after someone "subtracted 16,022 votes from Al Gore, and in still some undefined way, added 4000 erroneous votes to George W. Bush." Hours later, the votes were returned. One memo from Lana Hires of Global Election Systems, now Diebold, reads: "I need some answers! Our department is being audited by the County. I have been waiting for someone to give me an explanation as to why Precinct 216 gave Al Gore a minus 16,022 [votes] when it was uploaded." Another hacked internal memo, written by Talbot Iredale, Senior VP of Research and Development for Diebold Election Systems, documents "unauthorized" replacement votes in Volusia County.

Harris also uncovered a revealing 87-page CBS news report and noted, "According to CBS documents, the erroneous 20,000 votes in Volusia was directly responsible to calling the election for Bush." The first person to call the election for Bush was Fox election analyst John Eills, who had the advantage of conferring with his prominent cousins George W. Bush and Florida Governor Jeb Bush.

Incestuous relationships

Increasingly, investigative writers seeking an explanation have looked to Diebold's history for clues. The electronic voting industry is dominated by only a few corporations -- Diebold, Election Systems & Software (ES&S) and Sequoia. Diebold and ES&S combined count an estimated 80% of U.S. black box electronic votes.

In the early 1980s, brothers Bob and Todd Urosevich founded ES&S's originator, Data Mark. The brothers Urosevich obtained financing from the far-right Ahmanson family in 1984, which purchased a 68% ownership stake, according to the Omaha World Herald. After brothers William and Robert Ahmanson infused Data Mark with new capital, the

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name was changed to American Information Systems (AIS). California newspapers have long documented the Ahmanson family's ties to right-wing evangelical Christian and Republican circles.

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In 2001, the Los Angeles Times reported, "... primarily funded by evangelical Christians - particularly the wealthy Ahmanson family of Irvine - the [Discovery] Institute's \$1-million annual program has produced 25 books, a stream of conferences and more than 100 fellowships for doctoral and postdoctoral research." The chief philanthropists of the Discovery Institute, that pushes creationist science and education in California, are Howard and Roberta Ahmanson.

Comments: Stories of AS.

According to Group Watch, in the 1980s Howard F. Ahmanson, Jr. was a member of the highly secretive far-right Council for National Policy, an organization that included Lieutenant Colonel Oliver North, Major General John K. Singlaub and other Iran-Contra scandal notables, as well as former Klan members like Richard Shoff. Ahmanson, heir to a savings and loan fortune, is little reported on in the mainstream U.S. press. But, English papers like The Independent are a bit more forthcoming on Ahmanson's politics.

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"On the right, figures such as Richard Mellon Scaife and Howard Ahmanson have given hundreds of millions of dollars over several decades to political projects both high (setting up the Heritage Foundation think-tank, the driving engine of the Reagan presidency) and low (bankrolling investigations into President Clinton's sexual indiscretions and the suicide of the White House insider Vincent Foster)," wrote The Independent last November.

The Sunday Mail described an individual as, "... a fundamentalist Christian more in the mould of U.S. multi-millionaire Howard Ahmanson, Jr., who uses his fortune to promote so-called traditional family values ... by waving fortunes under their noses, Ahmanson has the ability to cajole candidates into backing his right-wing Christian agenda.

Ahmanson is also a chief contributor to the Chalcedon Institute that supports the Christian reconstruction movement. The movement's philosophy advocates, among other things, "mandating the death penalty for homosexuals and drunkards."

The Ahmanson family sold their shares in American Information Systems to the McCarthy Group and the World Herald Company, Inc. Republican Senator Chuck Hagel disclosed in public documents that he was the Chairman of American Information Systems and claimed between a \$1 to 5 million investment in the McCarthy Group. In 1997, American Information Systems purchased Business Records Corp. (BRC), formerly Texas-based election company Cronus Industries, to become ES&S. One of the BRC owners was Carolyn Hunt of the right-wing Hunt oil family, which supplied much of the original money for the Council on National Policy.

In 1996, Hagel became the first elected Republican Nebraska senator in 24 years when he did surprisingly well in an election where the votes were verified by the company he served as chairman and maintained a financial investment. In both the 1996 and 2002 elections, Hagel's ES&S counted an estimated 80% of his winning votes. Due to the contracting out of services, confidentiality agreements between the State of Nebraska and the company kept this matter out of the public eye. Hagel's first election victory was described as a "stunning upset" by one Nebraska newspaper.

Hagel's official biography states, "Prior to his election to the U.S. Senate, Hagel worked in the private sector as the President of McCarthy and Company, an investment banking firm based in Omaha, Nebraska and served as Chairman of the Board of American Information Systems." During the first Bush presidency, Hagel served as Deputy Director and Chief Operating Officer of the 1990 Economic Summit of Industrialized Nations (G-7 Summit).

Bob Urosevich was the Programmer and CEO at AIS, before being replaced by Hagel. Bob now heads Diebold Election Systems and his brother Todd is a top executive at ES&S. Bob created Diebold's original electronic voting machine software. Thus, the

brothers Urosevich, originally funded by the far Right, figure in the counting of approximately 80% of electronic voting in the United States.

Like Ohio, the State of Maryland was disturbed by the potential for massive electronic voter fraud. The voters of that state were reassured when the state hired SAIC to monitor Diebold's system. SAIC's former CEO is Admiral Bill Owens. Owens served as a military aide to both Vice President Dick Cheney and former Defense Secretary Frank Carlucci, who now works with George H.W. Bush at the controversial Carlyle Group. Robert Gates, former CIA Director and close friend of the Bush family, also served on the SAIC Board.

Diebold's track record

Wherever Diebold and ES&S go, irregularities and historic Republican upsets follow. Alastair Thompson, writing for scoop.co of New Zealand, explored whether or not the 2002 U.S. mid-term elections were "fixed by electronic voting machines supplied by Republican-affiliated companies." The scoop investigation concluded that: "The state where the biggest upset occurred, Georgia, is also the state that ran its election with the most electronic voting machines." Those machines were supplied by Diebold.

Wired News reported that "... a former worker in Diebold's Georgia warehouse says the company installed patches on its machine before the state's 2002 gubernatorial election that were never certified by independent testing authorities or cleared with Georgia election officials." Questions were raised in Texas when three Republican candidates in Comal County each received exactly the same number of votes - 18,181 - on ES&S machines.

Following the 2003 California election, an audit of the company revealed that Diebold Election Systems voting machines installed uncertified software in all 17 counties using its equipment.

Former CIA Station Chief John Stockwell writes that one of the favorite tactics of the CIA during the Reagan-Bush administration in the 1980s was to control countries by manipulating the election process. "CIA apologists leap up and say, 'Well, most of these things are not so bloody.' And that's true. You're giving politicians some money so he'll throw his party in this direction or that one, or make false speeches on your behalf, or something like that. It may be non-violent, but it's still illegal intervention in other country's affairs, raising the question of whether or not we're going to have a world in which laws, rules of behavior are respected," Stockwell wrote. Documents illustrate that the Reagan and Bush administration supported computer manipulation in both Noriega's rise to power in Panama and in Marcos' attempt to retain power in the Philippines. Many of the Reagan administration's staunchest supporters were members of the Council on National Policy.

The perfect solution

Ohio Senator Fedor continues to fight valiantly for Senate Bill 167 and the Holy Grail of the "voter verified paper audit trail." Proponents of a paper trail were emboldened when Athan Gibbs, President and CEO of TruVote International, demonstrated a voting machine at a vendor's fair in Columbus that provides two separate voting receipts.

The first paper receipt displays the voter's touch screen selection under plexiglass that falls into a lockbox after the voter approves. Also, the TruVote system provides the voter with a receipt that includes a unique voter ID and pin number which can be used to call in to a voter audit Internet connection to make sure the vote cast was actually counted.

Brooks Thomas, Coordinator of Elections in Tennessee, stated, "I've not seen anything that compares to the Gibbs' TruVote validation system. . . ." The Assistant Secretary of State of Georgia, Terrel L. Slayton, Jr., claimed Gibbs had come up with the "perfect solution."

Still, there remains opposition from Ohio Secretary of State Blackwell. His spokesperson Carlo LoParo recently pointed out that federal mandates under HAVA do not require a paper trail: "... If Congress changes the federal law to require it [a paper trail], we'll certainly make that a requirement of our efforts." LoParo went on to accuse advocates of a paper trail of attempting to "derail" voting reform.

U.S. Representative Rush Holt introduced HR 2239, The Voter Confidence and Increased Accessibility Act of 2003, that would require electronic voting machines to produce a paper trail so that voters may verify that their screen touches match their actual vote. Election officials would also have a paper trail for recounts.

As Blackwell pressures the Ohio legislature to adopt electronic voting machines without a paper trail, Athan Gibbs wonders, "Why would you buy a voting machine from a company like Diebold which provides a paper trail for every single machine it makes except its voting machines? And then, when you ask it to verify its numbers, it hides behind 'trade secrets.'"

Maybe the Diebold decision makes sense, if you believe, to paraphrase Henry Kissinger, that democracy is too important to leave up to the votes of the people.

Dr. Bob Fittrakis is Senior Editor of The Free Press (<http://freepress.org>), a political science professor, and author of numerous articles and books.

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Was the 2004 Election Stolen?

By Joel Bleifuss

December 10, 2004

Did the Bush-Cheney campaign engage in electronic vote fraud to ensure that George W. Bush would be president for another four years? That is a question every small-d democrat should be asking.

Much has been written on the Internet alleging that the election was stolen. Some writers are members of the tin-foil hat brigade, but others provide sober analysis of the election results that raise disturbing questions.

Unfortunately, thanks to the herd instinct in our current media culture, anyone who publicly raises this question is immediately labeled a conspiracy theorist.

In the December 6 *Nation*, Alexander Cockburn dismissed such speculation, writing, "As usual, the conspiracy nuts think plans of inconceivable complexity worked at 100 percent efficiency." Dan Thant Dang of the *Baltimore Sun* put it this way: "John F. Kerry barely had time to concede the presidential race before the conspiracy theory began circulating." The headline: "Election paranoia surfaces; Conspiracy theorists call results rigged."

On November 14, a *New York Times* editorial delivered the final verdict on what is now the conventional wisdom:

There is no evidence of vote theft or errors on a large scale. ... There is also no way to be sure that the nightmare scenario of electronic voting critics did not occur: votes surreptitiously shifted from one candidate to another inside the machines, by secret software. It's important to make it clear that there is no evidence such a thing happened, but there will be concern and conspiracy theories until all software used in elections is made public.

Suspend disbelief, buck conventional wisdom and suppose that "such a thing happened"—that the Bush-Cheney campaign "won" the election through systematic electronic voting fraud.

Would the Bush-Cheney campaign have any qualms about stealing an election? Of course not. They did it in 2000.

They had the motive, and they had the will. But is there any evidence that voting fraud was committed

Circumstantial evidence

Among the most compelling circumstantial evidence are the independent exit polls that predicted that John Kerry was destined to be the next president. Why were the exit polls, historically so accurate, so wrong?

"Exit polls are almost never wrong," wrote Republican pollster Dick Morris in the November 4 issue of *The Hill*. "So reliable are the surveys that actually tap voters as they leave the polling places that they are used as guides to the relative honesty of elections in Third World countries. ... To screw up one exit poll is unheard of. To miss six of them is incredible. It boggles the imagination how pollsters could be that incompetent and invites speculation that more than honest error was at play here." So perplexed was Morris by the data, he suspected a liberal media conspiracy to fix the exit polls so that the network would declare Kerry a winner and thereby discourage potential Bush voters in the West from going to the polls.

Steven F. Freeman, a statistical analysis professor at the University of Pennsylvania, found some disturbing anomalies when he examined the discrepancies between the predicted vote (exit polls) and the tallied results in 11 battleground states—Colorado, Florida, Iowa, Michigan, Minnesota, Nevada, New Hampshire, New Mexico, Ohio, Wisconsin and Pennsylvania.

The figures he used for the predicted vote came from the exit polls posted by CNN on its Web site. Due to an apparent computer glitch, CNN posted "uncalibrated" data—exit poll data not yet "corrected" to conform to the announced vote tallies—on its Web site until 1:30 a.m. (EST) election night.

In all of these states except Wisconsin, writes Freeman, the predicted margin of votes for each candidate differed from the tallied margin of votes for each candidate, with all the differences going in favor of Bush.

For example, Ohio exit polls predicted that Kerry would win 52.1 percent of the vote to Bush's 47.9 percent. But the tallied vote had Bush winning 51 percent of the vote to Kerry's 48.5 percent. The difference, then, between Ohio exit poll projections and the actual tallied vote for Kerry comes to 3.6 percent. Based on the size of the sample the exit polling firms were working with, the likelihood of this happening is less than 1 in 1000. Doing a similar analysis with exit polls in Florida, Freeman found a less than three in 1000 chance that the tallied results would differ as much as they did from the exit poll projections. And while Kerry did carry Pennsylvania, the chance that he would receive only 50.8 percent of the vote after exit polls indicated he would get 54.1 percent (a 3.3 percent difference) is less than two in 1000. Finally, according to Freeman, the odds against all three of these statistical anomalies occurring together are 250 million to one.

"As much as we can say in social science that something is impossible," he writes, "it is impossible that the discrepancies between predicted and actual vote counts in the three critical battleground states of the 2004 election could have been due to chance or random error."

What could account for this?

Freeman examines various explanations that have been made in the media for the discrepancy between the exit polls and the tallied vote, and finds all of them lacking.

“Neither the pollsters nor their media clients have provided solid explanations to the public,” Freeman writes. “Systematic fraud or mistabulation is a premature conclusion, but the election’s unexplained ex poll discrepancies make it an unavoidable hypothesis, one that is the responsibility of the media, academia, polling agencies and the public to investigate.”

Mystery votes

Examining the election results from a different angle, a team of researchers at the University of California, Berkeley analyzed the vote in Florida and found that, mysteriously, “electronic voting raise President Bush’s advantage from the tiny edge he held in 2000 to a clearer margin of victory in 2004.” The researchers calculate that electronic voting machines may have given Bush up to 260,000 more votes than he should have received. (Bush won Florida by 360,000 votes.) In the 15 Florida counties using electronic touch-screen voting systems, the number of votes tallied for Bush significantly exceeded the number of votes he should have received based on voter demographic and voter turnout data. This was especially true in the large, heavily Democratic counties of Broward, Palm Beach and Dade. In Florida counties that used other voting systems, Bush received the same number of votes that the data predicted.

Michael Hout, the chair of Berkeley’s Sociology and Demography graduate program, told Kim Zetter of *Wired.com*, “No matter how many factors and variables we took into consideration, the significant correlation in the votes for President Bush and electronic voting cannot be explained.”

The Berkeley researchers did a similar study in Ohio, but found no such correlation.

Both Hout and Freeman caution that their research has not yet undergone peer review. Freeman writes “I have tried to be as rigorous as possible in my data collection, review and analysis. ... To hold it to a academic standard of rigor, however, requires extensive peer review.”

Nightmare scenario

Was it technically possible to steal the election through electronic voting fraud? As the *New York Times* editorial noted, there is “is no way to be sure that the nightmare scenario of electronic voting critics did not occur.”

How secure were the electronic machines that were used to tabulate and count the vote? Diebold, the country’s largest voting machine company, made news in 2003 when leaked interoffice memos revealed that company executives knew that their machines were poorly protected against hackers. And in July 2003, researchers at the Johns Hopkins Information Security Institute reported that an examination of one Diebold voting system revealed “significant security flaws,” noting that “voters can trivially cast multiple ballots with no build-in traceability, administrative functions can be performed by regular voters, and the threats posed by insiders such as poll workers, software developers, and janitors is even greater.”

In Ohio, more than 35 counties used Diebold machines and nationwide, according to the company’s Web site “over 75,000 Diebold electronic voting stations are being used.”

So, somebody could have hacked the vote.

On November 5, Democratic Reps. John Conyers (Mich.), Jerrold Nadler (N.Y.) and Robert Wexler (Fla.), noting widespread questions raised about the accuracy of the results of the 2004 election, asked the Government Accountability Office (GAO) to investigate the "efficacy of voting machines and new technologies used in the 2004 election."

"The essence of democracy," they wrote, "is the confidence of the electorate in the accuracy of voting methods and the fairness of voting procedures. In 2000, that confidence suffered terribly, and we fear that such a blow to our democracy may have occurred in 2004."

Responding on November 23, the GAO agreed to examine "the security and accuracy of voting technologies, distribution and allocation of voting machines and counting of provisional ballots."

That would be a good place to start.

Joel Bleifuss is the editor of *In These Times*, where he has worked as an investigative reporter, columnist and editor since 1986. Bleifuss has had more stories on Project Censored's annual list of the "10 Most Censored Stories" than any other journalist.



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October 27, 2004

General Business Info: In 1859, Charles Diebold, a German immigrant, began manufacturing safes and vaults in Cincinnati, Ohio. In the 1880s and 1890s, the company made jails, hangman trap doors and padded cells for asylums. Diebold combined technology with banking systems and security. In 1947, Diebold purchased O.B. McClintock Company, which marked the Diebold's entry into drive-up banking systems. Continuing with technological development, Diebold created sophisticated electronic systems. President Raymond Koontz entered Diebold into the new ATM market in 1960. Diebold then introduced Total Automatic Banking System (TABS) 500. Robert W. Mahoney, chairman of Diebold in early 1990, joined IBM to form InterBold. Diebold and IBM combined knowledge of ATM systems with the necessary technical systems to create more complex computerized banking machines. Diebold became a billion dollar company in 1996. The same year, Diebold implemented the first Iris-scan ATM machines in the U.S. Diebold moved into the Electronic voting market at the start of the new millennium. In 2000, it provided 200,000 voting machines to Brazil in a deal valued at \$100 million. At issue in the current election, Diebold has become involved in touchscreen voting machines. Diebold (NYSE: DBD) is currently traded at \$45 a share.

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Diebold entered the self-serving elections market in 2002 with a system called Global Election Systems, some of the first units in touchscreen voting technology. Although Diebold is a significant leader in E-voting machines and systems, it only is responsible for 5 percent of Diebold's yearly profit (www.diebold.com).

Clients and Corporation

Contributions: With the presidential election less than a week away, concerns about the reliability of e-voting have arisen. Diebold is central to many of the e-voting concerns because many of the company's touch-screen machines will be used extensively in Georgia and Maryland, in two counties in California and in smaller quantities in Texas, Kansas, Virginia, Tennessee, North Carolina, Colorado, Florida and Wyoming. In an Associated Press (October 20, 2004), Mike Jacobsen, spokesperson for Diebold, discussed a lawsuit filed in California that claimed Diebold's equipment exposed California elections to hackers and software bugs. This controversy left many states, including the key battleground states of Ohio and Pennsylvania, less apt to use Diebold e-voting technology. There is fear and controversy that the lack of exit polls or dispensed receipts could lead to an increase in voter fraud. There has also been debate concerning close partisan ties between the Republican Party and Walden W. O'Dell, president and CEO of Diebold. In 2003 O'Dell attended a strategy forum with wealthy Bush benefactors at the president's Texas ranch. The next day Diebold was listed as one of the nation's eligible e-voting systems for the November 2004 election. The next week, O'Dell penned invitations to a \$1,000 a plate fundraiser to benefit the Ohio Republican Party (Smyth, 2004). The Board of Directors has also been active in fundraising for the Republican Party. In 2004, two prominent board members, Louis Bockius III and John Lauer, donated substantial amounts to the Republican Party. Louis Bockius donated \$23,000 to the

Republican National Committee in 2004 while John Lauer donated \$2,000

(). These close partisan ties between Diebold and the Republican Party may be illuminated in the wake of controversy if e-voting fraud is suggested post-election.

Reliability in 2004: Diebold has made several steps to prevent an e-voting catastrophe much like the 'Choicepoint' situation in Florida during the 2000 presidential election. This includes having the ballot immediately stored in several locations throughout the voting station. After the vote is stored, the information is scrambled to secure voter privacy. Unlike Choicepoint, Diebold has the ability to produce a "hard copy" of the ballots on standardized paper. In a recount, this would be useful. Diebold keeps a record of the total votes compiled during the election process. The main machine that Diebold provides for e-voting is called AccuVote-TSX (). Nonetheless, the controversy that Diebold has been playing with is its anonymity in its ability to produce a hard copy of the ballots. At the end of an election day in any precinct that uses Diebold e-voting system, a printed receipt is dispersed with election totals. Once again, the fear is that Diebold's e-voting system is too easily susceptible to hacking and software bugs. There are no printed receipts of who specifically voted for which President in the event a recount would be needed. Diebold e-voting systems merely spit out a total number of votes without any systematic statistics, this has left the election controversy in the hands of technology and Diebold software designers.

— Andrew Ralston and Peter Fotheringham



Lynn Investigates ...

➤ [Go back to Voting Machine Webpage](#)

Voting Machines Violate Constitution - Who Will Launch Legal Challenge?

by Lynn Landes 4-15-03

Wanted - one or more really good constitutional lawyers. Why? Voting machines. We need to challenge their use in our elections.

Voting machines violate the Constitution and threaten what's left of American democracy like no terrorist ever could. Only a handful of private companies sell and service the machines that register and tabulate votes in U.S. elections. And it's all done in complete secrecy. We've lost control of our election process and Congress doesn't seem to notice or care.

If this isn't fascism, I don't know what else to call it.

Over the last several years, particularly in 2002, election results in the U.S. have come under increasing suspicion due to widespread voting machine "glitches" and unexpected election upsets. In an overwhelming number of these questionable elections... Republicans won. That makes sense. Republicans, such as U.S. Senator Chuck Hagel (R-NE), long ago cornered the market in voting machine sales and service.

Some people think that voting machines can be made 'secure' by incorporating technical safeguards and standards, but that misses the point in law. Once the machine is in the polling booth critical parts of the voting process become unobservable and, therefore, violate Articles I & 2 of the Constitution and the Voting Rights Act. But, to my knowledge no individual or organization, such as the NAACP, ACLU or Common Cause, have challenged the constitutionality of voting machines. Although plenty of distraught candidates have gone to court accusing the voting machines of miscounting their votes, but to little avail.

In a November 1996 article for Relevance magazine, Philip O'Halloran wrote, "Many court cases involving allegations of fraud were brought against vendors of electronic systems. There were no convictions. Was there ever any proof of tampering presented? No. Part of the reason for this may be that during the litigation the plaintiffs were never given access to the vote tabulating program, and hence there was no opportunity for anyone to establish evidence to either prove or disprove the allegations. We should point out that even if the court allowed the plaintiff's experts to inspect the source-code, there would be no proof that the code provided to the court was, in fact, the selfsame code used in the particular election in question."

They're barking up the wrong tree anyway. How can a machine-produced vote ever constitute a legal vote? Isn't it merely circumstantial evidence of a vote produced by a machine that may or may not have been cast by a voter? In *Bush v. Gore* the Supreme Court said, "A legal vote is one in which there is a 'clear indication of the intent of the voter.'"

Voting machines reflect the action of the machine first and the intent of the voter ...maybe. When machines are in the voting booth three violations of federal law take place:

- inability to observe if voting machines properly register votes
- inability to observe if voting machines properly count votes
- inability to enforce the Voting Rights Act, because of the inability to observe if voting machines are properly

registering or counting votes

Enforcement of the Voting Rights requires that Federal Observers observe whether votes are being "properly tabulated." Civil Rights statutes state, "Observers are authorized to watch all polling place activities, including assistance to voters and the counting of ballots." However, voting machines constitute a concealed tabulation of the vote which cannot be observed by Federal Examiners, making the examiner's role in that regard moot and the federal Voting Rights Act unenforceable. Neldean Monroe, Voting Rights Program Administrator for the U.S. Office of Personnel Management admitted to this reporter in November of 2002 that there is no training and no opportunity for Federal Observers to observe the accuracy of voting machines.

There is significant case law that upholds the constitutional right to have votes cast and counted properly. The Supreme Court held in the following three cases:

Allen v. Board of Elections (1969) - "The Act further provides that the term "voting" "shall include all action necessary to make a vote effective in any primary, special, or general election, including, but not limited to, registration, listing or other action required by law prerequisite to voting, casting a ballot, and having such ballot counted properly and included in the appropriate totals of votes cast with respect to candidates for public or party office and propositions for which votes are received in an election."

Reynolds v Sims (1964) - "It has been repeatedly recognized that all qualified voters have a constitutionally protected right to vote and to have their votes counted. In *Mosley* the Court stated that it is "as equally unquestionable that the right to have one's vote counted is as open to protection as the right to put a ballot in a box." The right to vote can neither be denied outright nor destroyed by alteration of ballots nor diluted by ballot-box stuffing. As the Court stated in *Classic*, "Obviously included within the right to choose, secured by the Constitution, is the right of qualified voters within a state to cast their ballots and have them counted."

Wesberry v. Sanders (1964) - "It is in the light of such history that we must construe Art. I, 2, of the Constitution, which, carrying out the ideas of Madison and those of like views, provides that Representatives shall be chosen "by the People of the several States" and shall be "apportioned among the several States according to their respective Numbers." It is not surprising that our Court has held that this Article gives persons qualified to vote a constitutional right to vote and to have their votes counted."

But that's not happening. Our votes are not being cast or counted openly or properly. As far as we know some madman from Midland is counting them.

Lynn Landes is the publisher of EcoTalk.org and a news reporter for DUTV in Philadelphia, PA. Formerly Lynn was a radio show host for WDVR in New Jersey and a regular commentator for a BBC radio program. She can be reached at (215) 629-3553 / lynnlandes@earthlink.net.

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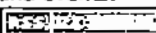
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Sham Recount Process on Diebold E-voting Machines

Lawsuit Challenges Berkeley Election Officials In Measure R Recount

Berkeley, CA - A close proposition referendum will come under court examination in a case that highlights major problems with conducting a recount using Diebold electronic voting machines. Berkeley Measure R, the Patient's Access to Medical Cannabis Act of 2004, lost by only 191 votes after the regular election on November 2, 2004. Under the law, the proponents were entitled to seek a recount, which they did.

Instead of attempting to ensure that the votes were counted correctly, however, Alameda County election officials engaged in a "going through the motions" exercise where they merely ran the same electronic vote data through the same counting machines and, predictably, reached the same result. They did not consult the machines' audit logs, redundant memories, or any other relevant materials. Yesterday, the county announced that the recount had failed to change the result. They altered the final margin of defeat to 166 votes, attributing the change to absentee and provisional ballots -- the electronic voting machine count remained the same.

Measure R proponents Americans for Safe Access filed a lawsuit on December 30 challenging the actions of county election officials in handling the electronic voting machine portion of the recount. This suit now awaits a hearing.



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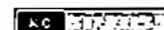
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Members:
1

"California law guarantees every voter the right to a recount and requires election officials to produce for public review all materials relevant to that recount," said Gregory Luke, attorney at the Santa Monica firm of Strumwasser & Woocher, which represents the plaintiffs Americans for Safe Access, and three individual Berkeley voters. "Because the Diebold machines purchased by Alameda County do not retain any ballots for the purpose of a recount, election officials must, at the very least, look at the information produced by the system's existing security features to give voters some circumstantial evidence that the machines performed properly and that vote data was not damaged or altered. Alameda County's refusal to allow the public to examine the audit logs and redundant memory renders the so-called 'recount' they conducted utterly meaningless."

"While it was easy to watch the recount of the paper ballots to make sure every vote was counted, the recount from the electronic voting machine was simply a 'rerun' of the original election results and gave us no assurance that the results were correct," added Debby Goldsberry of Americans for Safe Access.

"Recounts are one of the most important ways we detect vote fraud and error," said Matt Zimmerman, staff attorney for the Electronic Frontier Foundation, which is consulting on the case. "Even after Californians have voter-verified paper trails in 2006, it will be important to ensure that audit logs, redundant memory, and other security measures are checked during a recount, along with the paper trails. Banks and credit card issuers use these measures to make sure our financial transactions are safe. Our votes deserve at least as much protection."

Americans for Safe Access is the largest national grassroots coalition working to protect the rights of patients and doctors to legally use marijuana for medical purposes. Measure R would have relaxed zoning laws for dispensaries, set up a peer review committee to oversee operations at the city's dispensaries, and replaced the city's current limit with one linked to a patient's need as defined by his or her physician.

A hearing in Alameda Superior Court is currently set for March 2.

DOCUMENTS REGARDING INSTANT
RUNOFF VOTING IN ALAMEDA COUNTY

CONTRA COSTA

ALAMEDA COUNTY

Voting officials slam Diebold on instant-runoff system

Company accused of moving too slowly to update machines

By Patrick Hoge

CHRONICLE STAFF WRITER

Advocates of instant-runoff voting say Alameda County officials and Diebold Election Systems are dragging their feet, preventing a majority winner in a current Oakland City Council mail election and slowing efforts for instant-runoff voting in Berkeley.

In addition, several dozen election-reform advocates, including some local government officials, protested outside Alameda County offices in Oakland on Tuesday against what they said was an attempt by Diebold to overcharge the county for implementing instant-runoff voting.

"Diebold is holding the county

hostage to try to extort money," said Dave Heller, a co-ordinator of the successful campaign for instant-runoff voting in Berkeley, where it was approved by voters last year.

A Diebold official denied that the company was moving slowly or inflating prices.

"We're certainly not holding any part of this process up," said Steve Knecht, the company's California sales manager. He said a \$2 million figure to reconfigure the county's election system to allow for instant runoffs was a rough estimate, and that company officials are doing a more thorough analysis that should be made public within a few weeks. Alameda County Registrar Bradley Clark, who wrote a letter March 15 asking Diebold to develop a plan for implementing ranked-choice voting, said San Francisco spent about the same amount getting its instant-runoff voting system running in Novem-

ber's election.

Rodney Brooks, chief of staff to Alameda County Supervisor Keith Carson, called the \$2 million figure "ridiculous." Brooks contended that the company given the contract for the county's election equipment, Global Election Systems, had said it could be easily converted to ranked-choice voting. That firm was purchased by Diebold, which assumed the contract.

But Knecht countered that Global only told the county that touch screens could be easily adapted, not the entire system. A conversion would be complicated because it would require state and federal certification, but neither state nor federal agencies provide guidelines for instant-runoff voting.

About a year ago, complaints from Clark about the performance of Alameda County's Diebold electronic machines led to a state and county false claims law-

suit that resulted in the Tennessee-based company paying a \$2.6 million settlement in November.

Advocates say ranked-choice voting avoids costly runoff elections and makes elections more fair. Under the system, voters rank choices for the office being decided and if no candidate wins more than 50 percent of the vote, the lowest vote-getter is eliminated and the votes are redistributed by rank until someone receives a simple majority of votes.

In 2000, San Leandro voters approved a measure allowing the use of instant-runoff voting but recently spent \$80,000 on a special runoff election for a City Council district, San Leandro City Councilman Tony Santos said.

"That money was wasted," said Santos. "It could have been used to pay for a police officer or something."

Oakland voters in 2002 approved the use of instant-runoff

voting to fill City Council vacancies, and Berkeley voters approved it for all races in 2004.

Kenneth Modern, who ran the campaign for the instant-runoff measure in Berkeley and now runs a private election management firm, said he recently paid a company \$55,000 to create the system that was used in an election for officers of the KPFA-FM radio station, which has 96,000 voting members.

Berkeley City Councilman Kris Worthington said the county's failure to implement instant-runoff voting means that the will of a majority of voters in the ongoing special election for City Council in Oakland's District 2 will likely be denied.

"That is a tragedy and an injustice," Worthington said. "We need to put increased pressure on Diebold."

E-mail Patrick Hoge at phoge@sfchronicle.com.

To: All Alameda County Supervisors and all San Leandro City Councilpersons
From: Jim Lindsay, President and CTO, Voting Solutions, LLC; Co-founder, Californians for Electoral Reform
Date: February 27, 2005
Cc: San Leandro Chamber of Commerce, Californians for Electoral Reform, Center for Voting and Democracy, San Leandro Daily Review

As the President and Chief Technical Officer for a company that writes elections software, I was aghast at the supposed two million dollars it would cost to implement IRV for the City of San Leandro. This figure was apparently mentioned by the San Leandro City Clerk to a reporter, and was published in the Daily Review. This figure is ridiculous, as shown by the following facts:

- Proven tallying software is available immediately, and would cost no more than \$10,000, as I will go on record right now and offer that price to San Leandro – we have existing software that tallies IRV elections, with full auditing capabilities. It has been used by the City of Cambridge for many years, and was approved by the State of Massachusetts.
- Diebold must already have at least a user interface built for IRV, as they competed for a contract with Ireland, and had to demonstrate IRV capability.
- Diebold machines are used by the City of Cambridge to count their ranked ballot elections, and although the machines are different, the back end interface to our software should be quite similar.
- In the response to the county RFP, the County was assured that preferential voting would not be a problem for the machines that the vendor was trying to sell. The County was told, “The *AccuVote-TS* can easily be programmed for preferential voting...”. It is most curious for a task that is “easily programmed” to cost \$2,000,000.
[See Attachment A, below, for the full response to this question. Note that PRMaster is the Voting Solutions product referred to above, since renamed to ChoicePlusPro. Also, the vendor was mistaken in thinking that Cambridge uses cumulative voting. In fact, they use a system of ranked (or preferential) voting.]

The bottom line is that someone is trying to either thwart the will of the citizens of San Leandro by quoting a ridiculous price, or perhaps they are hoping to make a killing by charging two million dollars for a job that probably should cost a maximum of \$50,000. I would suggest an investigation into this quote – where did the two million dollar quote come from? If it came from Diebold, know that they are either trying to rip the county off, or they just don't want to do it so they are quoting a price they know will scare people away. If the quote came from staff, then the question has to be where that quote came from – again, certain staff people may not want to be bothered with IRV, and thus may be quoting a ridiculous price in order to scare people off.

Don't let anyone dissuade you from moving to IRV. It is simply much more democratic than either plurality or runoff elections, at a fraction of the cost of runoff elections. The very successful election in San Francisco proves beyond a doubt that IRV is completely trustworthy and completely viable.

Respectfully yours,

Jim Lindsay
President and CTO, Voting Solutions, LLC

ATTACHMENT A

Response to Alameda County RFP, question 6 of Exhibit G

(RFP responses were originally due May 31, 2000. I believe the county signed the contract with Global Election Systems on May 23, 2002. Note that Diebold subsequently bought Global, so the contract is now with Diebold.)

6. How will the DREVS manage alternative voting system such as cumulative or preferential voting?

Cumulative Voting, or Preferential voting is becoming more prevalent in the United States. Any County interested in implementing a full County-wide touch screen system AND cumulative or preferential voting also needs to consider that the absentee (optical scan) system much also be able to conduct cumulative or preferential voting. GLOBAL's *AccuVote-OS* and *TS* IS THE ONLY SYSTEM on the market today that handles cumulative and preferential voting.

GLOBAL's *AccuVote-OS* Voting System, through Global's proprietary software, is the only system that can conduct these types of elections due to the ability to place ovals in all 32 columns on the ballot (vs. a maximum of three columns on other optical scan system). This gives the voters the ability to rank candidate numerically. Systems limited to a 3 column optical scan ballot can not accomplish preferential voting.

The *AccuVote-OS* Voting System, through Global's proprietary software, is the only voting system that is currently utilized to automate the preferential voting mechanism. The City of Cambridge, Massachusetts conducts its off year council races using a cumulative, or preferential scheme. The City of Cambridge purchased the AccuVote System and GLOBAL developed an electronic interface, in conjunction with PR Master of Albany, California, to allow the City of Cambridge to electronically conduct their preferential voting elections. To the best of our knowledge, Global Election Systems is the only election company in the United States that has developed such a system, and has actually conducted elections in the cumulative voting [sic] environment.

The *AccuVote-TS* can easily be programmed for preferential voting; however it is not programmed to do so at this time, as there are no jurisdictional requirements to do so.

GEMS does keep track of both under votes and optical scan over votes.

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7. How does the DREVS handle multiple ballot types?

The GEMS system is designed to handle thousands of ballots styles in a single election. In King County, Washington, County-wide elections have up to 3,700 unique ballot styles due to precinct committee races. Capacity for number of ballot styles is part of the GEMS overall design.

Early Voting: During early voting, the voter requests a ballot at the counter. When the voter's address and name are entered, the correct district / precinct information is displayed in DIMS. This information will then be used to correctly create the voter SmartCard with the precinct / party information.

The **AccuVote-TS**, upon reading the SmartCard will create the correct ballot style with the appropriate races, candidates, and measures from the information stored on the **AccuVote-TS**.

Precinct Voting: In the precinct, if there are multiple ballot styles in a single precinct, the pollworker will create a SmartCard by keying in the precinct number / split number or the unique identifier for that ballot style OR, if preferred, the SmartCard burner LCD may list styles for that specific precinct. The poll worker would select or highlight the desired style (or party) and then hit the Create Card button. The specific method for this can be determined by the ROV.

In both precinct and early voting, the **AccuVote-TS** system will display the appropriate ballot style, or precinct split, on the screen for the voter.

May 3, 2005 - Berkeley Daily Planet

<http://www.berkeleydailyplanet.com/article.cfm?issue=05-03-05&storyID=21313>

Commentary: Instant Runoff Voting Held Up by Diebold

By LAURENCE SCHECHTMAN

Is the Diebold Corporation, famous for hackable, paperless voting machines, trying to strangle election reform in Berkeley? Or are they merely greedy, lazy and incompetent?

Either way it is Diebold which stands in the way of implementing Berkeley's Measure I in favor of Instant Runoff Voting (IRV), which was passed by a margin of 72 percent in March of 2004.

IRV, also known as preferential or ranked choice voting, allows us to rank our choices for mayor or City Council candidate. We could vote for three candidates for mayor, a first, a second and a third choice, so that if our first choice comes in last, then our second choice is counted. If that step does not produce a winner, then the next person on the bottom is eliminated until someone has captured 50 percent plus one. The runoff, in other words, is held instantly instead of six weeks later.

There are three major advantages to IRV. First, by avoiding a second election, both the city and the candidates save a lot of money. Second, a separate runoff always attracts far fewer voters, and especially fewer poor and student voters, so that there is a chance that the winner of the runoff in December gets fewer votes than the original leader in November. Which is how "moderate" Shirley Dean beat "progressive" Don Jelinek in the mayor's race of 1994.

The most important advantage of preferential voting, however, is that it cures the disease of lesser evilism. You don't have to vote for one of the big two: Jelinek to keep out Dean or vice versa. You can vote for whoever you want as your first choice, and then for the frontrunner in second place, which keeps out your main enemy just as effectively. Neither mainstream Democrats nor Republicans, however, are too happy about losing "their" voters to third parties, which may explain why State Senate Bill 596, which grants all California cities the right to choose IRV, has not been able to make it out of committee.

But for us, wouldn't it be great to be able to vote our hearts without fear? The big two wouldn't be able to take us for granted. They would have to make alliances, or at least be polite, with the third and fourth party or candidate, which is exactly what has been happening in San Francisco. In fact in District 5 in the city's last election, 18 candidates established a "candidates collaborative" which has resulted in long range neighborhood co-operation. And sometimes, Ms. 3 or Mr. 4 might actually win.

So why do we still have to debate this issue, a year after it won decisively at the polls. Because Diebold, which owns the contract on voting machines for Alameda County, wants two million dollars to write IRV into their systems here. And in the age of Bush and Schwarzenegger, the county and the cities are carrying huge deficits. (San Leandro and Oakland have also approved preferential voting systems) But even if money were available, Diebold says that it isn't going to get around to working on the problem for another year, which means that IRV will probably not be ready for the November 2006 city elections, two and a half years after the passage of Berkeley's initiative.

The problem with Diebold's obstructionism, of course, is that there isn't any problem. Instant runoff voting has been solved. San Francisco does it with great success, and British Columbia is voting about a variant of IRV next May 17. Computer codes for counting votes IRV-style are open source. Anyone can copy and use them for free. (If you want to check out this availability you can contact "The Open Voting Consortium" at "<http://www.Openvoting.org>" or "Elections Solutions" at "<http://www.ElectionSolutions.com>")

It is possible that Diebold's demand for \$2 million constitutes an actionable breach of contract. When Alameda County first acquired the present touchscreen computers, the Diebold subsidiary GEMS wrote in their proposal that, "The AccuVote-TS can easily be programmed for preferential voting." Would a jury find that this "easy" programming change was worth two million? Diebold has already had to pay out 2.6 million to Alameda and California to settle a false claims lawsuit.

Diebold's "pricing policy" is revealed in this internal e-mail which found its way into the "Baltimore Gazette" in December 2003: "They (the public) already bought the system. At this point they are just closing the barn door. Let's just hope that as a company we are smart enough to charge out the yin if they try to change the rules now and legislate voter receipts." "Ken" (writer of the e-mail) later clarifies that he meant "out the yin-yang," adding, "any after-sale changes should be prohibitively expensive."

On April 19 about 70 people were out protesting against Diebold in front of the Alameda County Office Building near Lake Merritt. None of the speakers could understand where the two million figure came from. Kenny Mostern, who headed Berkeley's successful campaign for IRV, said that the Pacifica Radio election, which he also directed, was conducted by means of preferential voting for \$55,000. Rodney Brooks, chief of staff for County Supervisor Keith Carson, called the \$2 million "ridiculous." The Berkeley City Council, according to Councilmember Kris Worthington, has hired a consultant, former City Clerk Sherry Kelly, to shepherd IRV through the county and state bureaucracies.

Now is the time to pressure the five Alameda County Supervisors to act. Registrar Brad Clark, who was responsible for the original Diebold connection, and has done nothing to challenge their price estimate, is leaving Alameda County to go to work with the new Republican secretary of state. The supervisors could use our input about hiring a new registrar who will fight to uphold the will of the voters in Berkeley, San Leandro and Oakland. Keith Carson, whose district includes Berkeley, is leading the struggle to implement IRV. But the other supervisors are understandably more immediately concerned with the county's 77 million dollar deficit.

Citizens should contact the supervisors or the IRV in Alameda County Now! coalition at 665-5457 or "<mailto:Alamedacountyirv@gmail.com>"

It is still possible for Berkeley to once again be a model of democratic participation.

Laurence Schechtman is a Berkeley resident.

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April 20, 2005 - Contra Costa Times

<http://www.contracostatimes.com/mld/cctimes/news/11440249.htm>

Call for instant runoffs carries a hefty price tag

By Guy Ashley

OAKLAND - A growing movement in favor of instant-runoff voting in Alameda County is being thwarted by the manufacturer of the county's electronic voting machines, critics charged Tuesday.

At a rally at the county administration building, protesters chided Diebold Elections Systems, and recent assertions that it will cost up to \$2 million and take at least a year for software upgrades and other work needed to allow Alameda County's Diebold voting machines to tabulate instant runoffs.

Critics said the revelations clash with promises made by the manufacturer at the time Alameda County purchased the electronic machines for \$12 million in 2002.

They brandished copies of bid documents issued before the purchase, claiming the machines "can easily be programmed" to conduct instant runoffs.

"Presumably they said that because they wanted to get the contract," said Kriss Worthington, a city councilman in Berkeley, where voters last year authorized instant runoffs.

Referring to Texas-based Diebold, Worthington added: "But now that we have several cities pushing for instant-runoff voting, they're singing a different tune."

Instant runoffs allow voters to rank their choices for elective office as a way to decide races involving the two top vote-getters without having to conduct costly special runoff elections. If either of the top finishers fails to achieve a majority vote, an "instant runoff" is conducted by counting voters' second- and third-ranked choices.

The concept has gained popularity in recent years as the need for special elections has grown more frequent and costs have increased.

With cost estimates emerging three years after the county was promised equipment that could easily be modified, "many feel Diebold is being disingenuous with us," said Rodney Brooks, chief of staff to county Supervisor Keith Carson.

Diebold spokesman David Bear said Tuesday that he was unaware of the \$2 million price tag attached to the upgrades needed in Alameda County, but agreed that software enhancements and other work would "carry some costs."

"We continue to work in partnership with Alameda County," Bear said. "But people need to understand that (the required upgrades) can't just happen over night."

The \$2 million cost cited by protesters came from a March letter by Bradley Clark, Alameda County's registrar of voters, who wrote to the county's Council of Leagues of Women Voters that "costs associated with development of software to conduct an Instant Runoff Election could be up to \$2 million."

Clark last week accepted a job with the California Secretary of State's office, and is working in his Alameda County post only two days a week as he prepares for the transition. He could not be reached for comment Tuesday.

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April 21, 2005 - Oakland Tribune

["http://www.insidebayarea.com/oaklandtribune/localnews/ci_2677895"](http://www.insidebayarea.com/oaklandtribune/localnews/ci_2677895)

Instant-runoff voting urged for Alameda County

Supervisors hear of system that saves money and enhances participation

By Ian Hoffman

Spurred by the nation's largest experiment in instant-runoff voting in San Francisco, activists and a handful of local politicians demanded the latest flavor of democracy for Alameda County voters.

Protesters criticized the county's reluctance to embrace instant-runoff voting, saying that casting ballots for multiple, ranked candidates would save money and foster richer, more issue-driven political campaigns.

But on Tuesday they saved the sharpest ridicule for the county's voting vendor, Diebold Election Systems Inc.

In 2002, Diebold promised Alameda County that its new touch-screen voting machines, purchased for \$12 million, "can easily be programmed for preferential voting."

But recently Diebold and county elections officials have said new instant-runoff software for the touch screens will cost \$2 million more.

"It's insulting to us to be told it's going to cost \$2 million," said Kenneth Mostern, who ran a successful campaign in Berkeley to rally support for instant-runoff voting. Seventy-two percent of voters backed the measure more than a year ago.

"We passed it, it's the law. It has to be put in place," Mostern told a cheering audience of 45 instant-runoff protesters outside county offices.

With the county confronting a \$92 million deficit this year, county politicians don't know how they'll pay for instant-runoff voting. But Keith Carson, president of the county supervisors, is backing the idea.

"Two million dollars is the ridiculous figure that Diebold has quoted," said Carson's chief of staff, Rodney Brooks. "I can't think of anything that's 'easy' that costs \$2 million."

With instant-runoff voting, voters cast ballots for their first, second and third choices in each race. Backers say the system forces politicians to broaden their appeal and woo voters beyond their own factions.

Oakland, for example, is holding a special City Council election to fill its District 2 seat. In the current field of eight candidates, the winner could claim the seat with as little as 12 percent of the vote.

Green Party candidate Aimee Allison said instant-runoff voting for the District 2 seat would encourage more people to run and campaign with other candidates on issues of wide appeal.

"Coalition building is a way that we as a community move forward," she said.

County elections officials could not be reached for comment Tuesday. But they've taken a wait-and-see approach, only recently gathering city clerks to study the issue in a panel that advocates say has been closed to public attendance.

Supporters say San Francisco's experiment last year was a resounding success. On the other hand, instant-runoff proponents pressed so aggressively to implement the system that the county's vendor, Elections Systems and Software, never performed full testing before the election. A bad line of code prevented the computer from calculating the ranked choices beyond 10,000 votes, and new software had to be written on the fly to get the final tally.

Exit polls showed a majority of voters were pleased with the new system, however.

Contact Ian Hoffman at "<mailto:ihoffman@sfgate.com>".

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April 20, 2005 - San Francisco Chronicle

[http://www.sfgate.com/cgi-](http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2005/04/20/BAGP2CBS6J1.DTL)

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**Voting officials slam Diebold on instant-runoff system
Company accused of moving too slowly to update machines**

By Patrick Hoge

Advocates of instant-runoff voting say Alameda County officials and Diebold Election Systems are dragging their feet, preventing a majority winner in a current Oakland City Council mail election and slowing efforts for instant-runoff voting in Berkeley.

In addition, several dozen election-reform advocates, including some local government officials, protested outside Alameda County offices in Oakland on Tuesday against what they said was an attempt by Diebold to overcharge the county for implementing instant-runoff voting.

"Diebold is holding the county hostage to try to extort money," said Dave Heller, a co-coordinator of the successful campaign for instant-runoff voting in Berkeley, where it was approved by voters last year.

A Diebold official denied that the company was moving slowly or inflating prices.

"We're certainly not holding any part of this process up," said Steve Knecht, the company's California sales manager. He said a \$2 million figure to reconfigure the county's election system to allow for instant runoffs was a rough estimate, and that company officials are doing a more thorough analysis that should be made public within a few weeks.

Alameda County Registrar Bradley Clark, who wrote a letter March 15 asking Diebold to develop a plan for implementing ranked-choice voting, said San Francisco spent about the same amount getting its instant-runoff voting system running in November's election.

Rodney Brooks, chief of staff to Alameda County Supervisor Keith Carson, called the \$2 million figure "ridiculous." Brooks contended that the company given the contract for the county's election equipment, Global Election Systems, had said it could be easily converted to ranked-choice voting. That firm was purchased by Diebold, which assumed the contract.

But Knecht countered that Global only told the county that touch screens could be easily adapted, not the entire system. A conversion would be complicated because it would require state and federal certification, but neither state nor federal agencies provide guidelines for instant-runoff voting.

About a year ago, complaints from Clark about the performance of Alameda County's Diebold electronic machines led to a state and county false claims lawsuit that resulted in the Texas-based company paying a \$2.6 million settlement in November.

Advocates say ranked-choice voting avoids costly runoff elections and makes elections more fair. Under the system, voters rank choices for the office being decided and if no candidate wins more than 50 percent of the vote, the lowest vote-getter is eliminated and the votes are redistributed by rank until someone receives a simple majority of votes.

In 2000, San Leandro voters approved a measure allowing the use of instant-runoff voting but recently spent \$80,000 on a special runoff election for a City Council district, San Leandro City Councilman Tony Santos said.

"That money was wasted," said Santos. "It could have been used to pay for a police officer or something."

Oakland voters in 2002 approved the use of instant-runoff voting to fill City Council vacancies, and Berkeley voters approved it for all races in 2004.

Kenneth Mostern, who ran the campaign for the instant-runoff measure in Berkeley and now runs a private election management firm, said he recently paid a company \$55,000 to create the system that was used in an election for officers of the KPFA-FM radio station, which has 96,000 voting members.

Berkeley City Councilman Kriss Worthington said the county's failure to implement instant-runoff voting means that the will of a majority of voters in the ongoing special election for City Council in Oakland's District 2 will likely be denied.

"That is a tragedy and an injustice," Worthington said. "We need to put increased pressure on Diebold." E-mail Patrick Hoge at patrickhoge@sfbay.com.

US Count Votes'
National Election Data Archive Project
Analysis of the 2004 Presidential Election Exit
Poll Discrepancies

<http://electionarchive.org/ucv/Analysis-US-Exit-Polls-2004-Mito-Sky-Edison-1-27>

Response to the *Edison/Mitofsky Election System 2004 Report*

<http://exit-poll.net/election-night/EvaluationJan192005.pdf>

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Introduction

After last November's presidential election, there were thousands of reports of irregularities. Reported problems⁴ included:

- voting machine shortages
- ballots counted and recounted in secret
- lost, discarded, and improperly rejected registration forms and absentee ballots
- touch-screen machines that registered "Bush" when voters pressed "Kerry"
- precincts in which there were more votes recorded than registered voters
- precincts in which the reported participation rate was less than 10%
- high rates of "spoiled" ballots and under-votes in which no choice for president was recorded
- a sworn affidavit by a Florida computer programmer who claims he was hired to develop a voting program with a "back door" mechanism to undetectably alter vote tallies

These problems arose in the context of vote recording and counting systems developed, provided, and maintained primarily by a handful of private vendors with partisan ties, and where nonauditable voting equipment which cannot provide assurance that votes are counted as cast, tallied about 30% of the national vote⁵. The crucial question is whether these problems were part of a larger pattern. Were these issues collectively of sufficient magnitude to reverse the outcome of the election, or were they isolated incidents, procedurally disturbing but of little overall consequence?

Importance of Exit Polls

Under such circumstances we must rely on indirect evidence - such as exit polls, or analysis of election result data - as a check of the overall integrity of the official election results. Without auditability or transparency in our election systems, the role of exit polls as a trigger for further scrutiny is of paramount importance.

Background

The 2004 exit polls were conducted by Edison Media Research and Mitofsky International (Edison/Mitofsky, or E/M) on contract with major national press and TV news services, operating collectively as the National Election Pool. Edison/Mitofsky conduct exit polls in every state plus a nationwide exit poll. Confidential exit poll data showing John Kerry ahead of George Bush in several key "battleground states" was disclosed to the general public on the afternoon of November 2.

Immediately following the election, the national exit polls showed that Kerry had won the popular

⁴ Reports were recorded by non-partisan organizations Vote Watch, Vote Protect, and Voters Unite: <http://www.votecheck.org>, <http://www.votecheck.org>, and by the U.S. House Committee on the Judiciary, "Preserving Democracy: What Went Wrong in Ohio" (January 5, 2005)

⁵ Simon, J. and Baiman, R., "The 2004 presidential Election: Who Won The Popular Vote? An Examination of the Comparative Validity of Exit Poll and Vote Count Data", January 1, 2005, p. 5-6

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=417777

vote by a margin of 3.0%.⁶ However, by the morning of November 3rd, the official vote counts showed Bush defeating Kerry by 2.5% in the popular vote.

This discrepancy between exit polls and the official election results has triggered a controversy which has yet to be resolved.

Shortly after the exit poll disparity was noted, the Edison/Mitofsky group took the position that their own projections could not be taken as an indication of error in the official vote count. The theory they put forward to explain the disparity was that more of the Bush voters had declined to be interviewed for the exit polls, while more of the Kerry voters had completed the poll questionnaire.⁷

Immediately after the election, those skeptical of Edison/Mitofsky's explanation tried to obtain the precinct-level unadjusted exit poll data to independently test Edison/Mitofsky's explanation, but the raw data has not, to this day, been released. In the absence of raw data, analyses were done using "screen captures" of data published to the Internet on election night⁸. One such analysis of unadjusted exit poll data was done by Ron Baiman⁹. Baiman found that statistically significant discrepancies of exit poll results from reported election outcomes were concentrated in five states, four of which were key battleground states.

Is this merely a coincidence? How much of a coincidence was it?

Baiman concluded that the probability that these discrepancies would simultaneously occur in just the most critical states of Ohio, Florida, and Pennsylvania (rather than in any other randomly selected group of three states), is less than 1/330,000. This analysis agrees with an earlier calculation by Steven Freeman showing that the probability that random chance accounted for simultaneous exit poll discrepancies in Florida, Pennsylvania and Ohio was well outside of the realm of statistical plausibility.¹⁰

On January 19, 2005, Edison Media Research and Mitofsky International released a 77-page report "Evaluation of Edison/Mitofsky Election System 2004". The Edison/Mitofsky report acknowledged widespread discrepancies between their exit polls and official counts, admitted that the differences were far greater than can be explained by sampling error, and asserted that this disparity was "most likely due to Kerry voters participating in the exit polls at a higher rate than Bush voters" (p. 3).

⁶ p. 20, "Evaluation of Edison/Mitofsky Election System 2004" prepared by Edison Media Research and Mitofsky International for the National Election Pool (NEP) Jan. 19, 2005

⁷ Election survey analysts ordinarily assume that official election results are the objective standard against which their own findings must be weighed, and perhaps found wanting. Edison/Mitofsky's willingness to find fault with their own methods and results is consistent with professional norms and practices.

⁸ See Appendix B

⁹ Affidavit in Bill Moss vs. George Bush et al. Ohio Case by Ron Paul Baiman, Ph.D. Economics, posted at <http://electionarchive.org>

¹⁰ Freeman, S.F., "The Unexplained Exit Poll Discrepancy" A Research Report from the University of Pennsylvania, Graduate Division, School of Arts & Sciences, Center for Organizational Dynamics. December 29, 2004

¹¹ <http://www.electionarchive.org/2004/11/29/exitpolls.html>

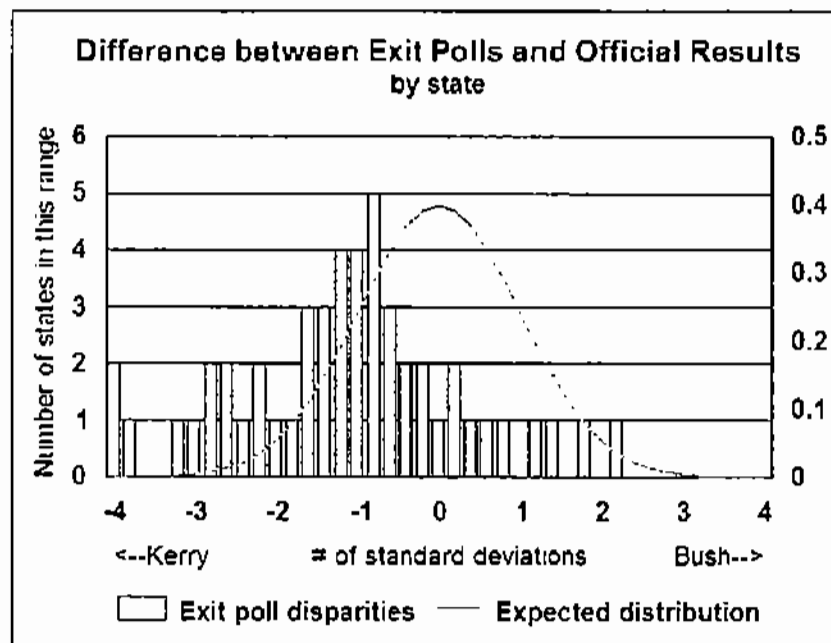
Did Edison/Mitofsky's January 19th report support their assertion that Bush voters were more reluctant to participate in exit poll surveys than Kerry voters? Did their analysis confirm the "Reluctant Bush Responder" hypothesis?

ANALYSIS

I. Explanation #One - Random Error

Definition of WPE: "Within Precinct Error" is the average of the difference between the percentage margin between the leading candidates in the exit poll and the actual vote for all sample precincts in a state. The sign of the WPE gives the direction of the error. A negative number means that the exit polls were more favorable to Kerry than the actual election results, while a positive number means the exit polls were more favorable to Bush than the actual election results. WPE can be roughly thought of as the percentage discrepancy between election results and exit poll results within sampled precincts.

Edison/Mitofsky WPE (within precinct error) scores for difference between the election results and exit polls by state are clearly skewed:



Seven of fifty states have standardized values less than -2.7 , meaning that each of them had less than 1% probability of having the reported difference between exit polls and election results occurring by chance. The probability of seven values being less than -2.7 , approximated via standard normal distribution probabilities is 0.0035^{**7} . For the t-distribution with 40 degrees of freedom, a more conservative value is 0.005^{**7} . A full comparison of the exit polls with the null distribution (blue curve) via a Shapiro-Wilk test yields a probability that is microscopically small that such exit poll discrepancies could occur by chance.

Aside from three outlier states (on the left) the data appear to be normally distributed with the mean

shifted 1.0 standard deviations toward Kerry. The data without these three passes the Shapiro-Wilk test for normality ($p=.4$), with a shifted mean.

We agree with Edison/Mitofsky, as stated in their report, that random chance as a possible explanation for discrepancies between exit polls and official election results can be dismissed.

Having eliminated random chance as a cause of the discrepancies between election and exit poll results, two hypotheses remain to explore: Exit polls were subject to a consistent bias or the official vote count was corrupted.

II. Explanation #Two - Exit Poll Error

A. Exit Poll Science

Exit polling is a well-developed science, informed by half a century of experience and continually improving methodology¹¹. Edison/Mitofsky samples voters for a nationwide exit poll as well as for each state's exit poll.

Best Practices Exit Poll Methodology involves three steps:

1. *Choose a set of representative precincts that mirrors the state as a whole in demography and historic voting patterns. ("out of precinct" sampling)*
2. *Randomly select and interview voters from those precincts for polling as they leave the polling place. ("within precinct" sampling)*
3. *Algebraically weight to correct for the observed demographic composition of the sample. For example, re-balance by race and gender in this process to assure a representative sampling of the state.*

Were the Right Precincts Sampled?

To confirm that steps number 1 and 3 were done correctly, *official vote tallies* from the sampled precincts were substituted by Edison/Mitofsky for exit poll results in their weighting formulas, to see if the results would correctly "predict" statewide voting patterns. This procedure (E/M pp. 28-30) confirms that steps number 1 and 3 worked well. The selected precincts accurately predicted the results in their respective states, with only a small observed bias (0.3%) which was actually in the *opposite direction* to the bias that resulted when exit poll numbers were used.

Were Voters Randomly Selected and Interviewed?

Problems with step number 2, improper selection of voters, can cause within-precinct error (WPE¹²). Edison/Mitofsky seek to explain the overall disparity between exit polls and official election results in

¹¹ *Polling and presidential Election Coverage*, Lavrakas, Paul J, and Holley, Jack K., eds., Newbury Park, CA: Sage; pp. 83-99.

¹² See prior definition of WPE on p. 7 in this document.

terms of WPE. They calculate that the required shift toward Kerry in the exit polls must have been 6.5%. They note that this number is greater than any WPE from past presidential elections going back more than 20 years, to a time when polling science was less sophisticated and less reliable than at present. They also note that this 6.5% WPE stands out in comparison to an average 1.9% WPE from 2004 state primaries exit polls.

Adjusting the Exit Polls using Reported Election Results

The E/M report claims that all of the error is "within precinct error (WPE)" because using reported precinct level election results with a "Sample Precinct Model" (SPM) gives close to reported results (p. 28-30). But this does not necessarily follow because the SPM may use reported election results (p. 9), and may be adjusting the weights over time based on these reported results. This implies that computations with these new weights may not be fully "unadjusted" predictive exit poll estimates.

To the extent that SPM adjustments are based on reported election results, exit poll discrepancies derived from weights that "have not been adjusted" may be out of precinct. This leaves open the possibility that "central office mis-tabulation", and/or "discriminatory voter suppression", that are not taken into account when using precinct weights that are derived from past voter participation rates to calculate state level exit poll results, could explain part of the discrepancy. Access to the raw precinct level data and weights used to calculate final unadjusted state level exit polls, is necessary to investigate this hypothesis.

The "Reluctant Bush Responder" (rBr) hypothesis

The E/M report, however, explains the WPE with the following statement (p. 31):

"While we cannot measure the response rate by Kerry and Bush voters, hypothetical response rates of 56% among Kerry voters and 50% among Bush voters overall would account for the entire Within Precinct Error that we observed in 2004."

This, apparently, is the basis for their statement in the Executive Summary (p. 4), "It is difficult to pinpoint precisely the reasons that, in general, Kerry voters were more likely to participate in the exit polls than Bush voters."

No data in the E/M report supports the hypothesis that Kerry voters were more likely than Bush voters to cooperate with pollsters and, in fact, the data provided by E/M suggests that the opposite may have been true.

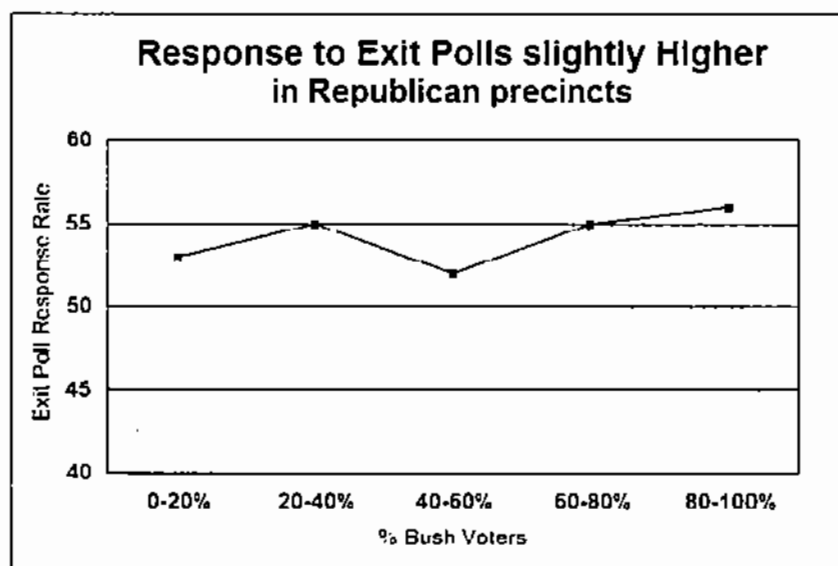
Table 1: Partisanship Precinct Data given in the Edison/Mitofsky Report (pp. 36, 37)

| Partisanship of Precinct by Election Results | | Number of Precincts | mean WPE exit poll discrepancy | median WPE exit poll discrepancy | Combined Response Rate | Refusal Rate | Miss Rate |
|--|-----------------|---------------------|--------------------------------|----------------------------------|------------------------|--------------|-----------|
| 80< Kerry <=100% | 0< Bush <=20% | 90 | 0.3% | -0.4% | 53% | 35% | 12% |
| 60< Kerry <=80% | 20< Bush <=40% | 165 | -5.9% | -5.5% | 55% | 33% | 12% |
| 40< Kerry <=60% | 40< Bush <=60% | 540 | -8.5% | -8.3% | 52% | 37% | 11% |
| 20< Kerry <=40% | 60< Bush <=80% | 415 | -6.1% | -6.1% | 55% | 35% | 10% |
| 0< Kerry <=20% | 80< Bush <=100% | 40 | -10.0% | -5.8% | 56% | 33% | 11% |

The following analysis by US Count Votes is based on the data in the above Table 1 which is provided in the Edison/Mitofsky report. We will use it to show that it is not plausible that the "Reluctant Bush Responder" hypothesis explains the exit poll discrepancy in the November 2004 presidential election.

B. Exit Poll Discrepancies Rise with Concentration of Bush Voters

The reluctant Bush responder hypothesis would lead one to expect a higher non-response rate where there are many more Bush voters, yet Edison/Mitofsky's data shows that, in fact, the response rate is slightly higher in precincts where Bush drew $\geq 80\%$ of the vote (High Rep) than in those where Kerry drew $\geq 80\%$ of the vote (High Dem).



The chart above was constructed from data within the E/M report (p. 37). This data bears directly on the plausibility of the report's central hypothesis, and it goes in the wrong direction. In precincts with higher numbers of Bush voters, response rates were slightly *higher* than in precincts with higher number of Kerry voters.

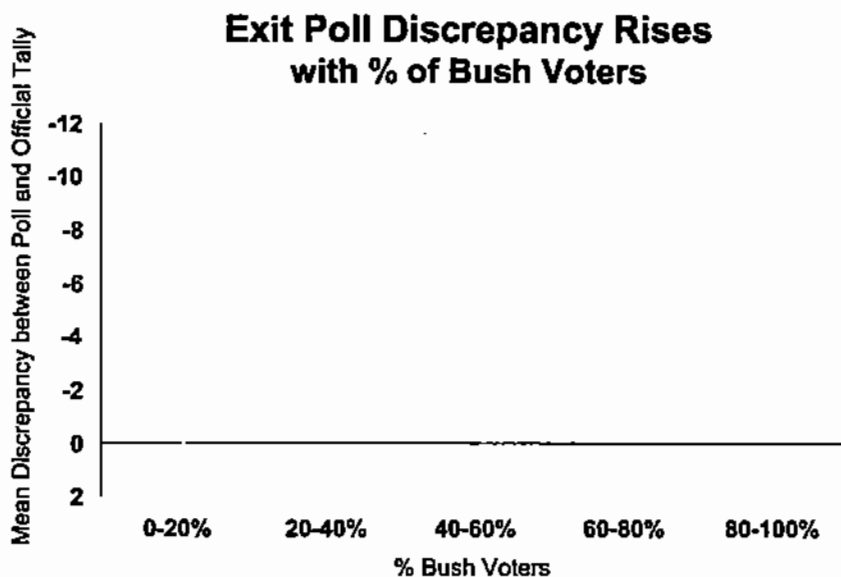
Precincts in which Bush supporters were dominant actually completed the poll questionnaire at a rate higher than precincts in which Kerry dominated. This fact undermines the report's central premise that Kerry supporters were more likely than Bush supporters to participate in the exit poll.

"Reluctant Bush Responder in Mixed Political Company" (rBrmpc) hypothesis

Yet it is not conclusive proof that the E/M hypothesis is wrong, because some have hypothesized that Bush supporters were more diffident about expressing their views in mixed political company than Kerry supporters.

It has been suggested that the Bush supporters participated at high rates in precincts where they were surrounded by other Bush supporters, while Bush supporters in predominantly-Kerry precincts were more reticent than their counterpart Kerry supporters voting in predominantly Bush precincts. This "reluctant Bush exit poll participant in predominantly Kerry precincts" hypothesis is also inconsistent with the E/M data.

If the polls were faulty because Bush voters were shy in the presence of Kerry voters and less likely to cooperate with pollsters, then the polls should be most accurate in those precincts where Bush voters were in the overwhelming majority and where exit poll participation was also at its maximum.



What we find is just the opposite: in fact, *the mean exit poll discrepancy was dramatically higher in Bush strongholds than in Kerry strongholds (-10.0 versus 0.3)*. In precincts with 80-100% Bush voters, where exit poll participation reached its highest level (56%), there was a full 10% mean difference between official vote tallies and the exit poll results.

Alternate hypothesis: "Bush Strongholds have more Vote-Count Corruption" (Bsvcc)

An alternative hypothesis that is more consistent with the data is that corruption of the official vote count occurred most freely in districts that were overwhelmingly Bush strongholds.

If Edison/Mitofsky would release the detailed results of their poll to the public then much more could be said about this hypothesis, and the suspicious precincts could be identified. If E/M does not release its list of sampled precincts, US Count Votes believes it will still be possible to rigorously test the hypothesis that the vote counts were corrupted by assembling and analyzing a precinct-level nationwide database containing detailed election results, voting equipment information and demographic data.

Higher exit poll response rates and higher exit poll discrepancies occurred in Bush strongholds. E/M's own data contradict both the rBr and the rBrmpc hypotheses and support the Bsvcc hypothesis.

C. Implausible Exit Poll Participation Patterns Are Needed to Satisfy E/M's data.

The Edison/Mitofsky Report states:

"Our investigation of the differences between the exit poll estimates and the actual vote count point to one primary reason: in a number of precincts a higher than average Within Precinct Error (WPE) most likely due to Kerry voters participating in the exit polls at a higher rate than Bush voters." (Page 3)

It is mathematically possible to construct a set of response patterns for Bush and Kerry voters while faithfully reproducing all of Edison/Mitofsky's "Partisanship Precinct Data" given in Table 1. (Appendix A)

The following Table 2 shows the required calculated Bush and Kerry response rates if we assume 90% Bush voters in 80 - 100% Bush precincts, 70% average Bush voters in 60-80% Bush precincts, and so forth.

| Table 2: Calculated Required Bush & Kerry Response Rates using midpoints of precinct intervals as the assumed Bush/Kerry voter percentages in partisan precincts. | | | | Assumed % of Kerry/Bush voters in partisan precincts | | Required Response Rates for entire sample | |
|---|------------------|----------|---------------|--|-------|---|-------|
| Partisanship of Precinct based on Election Results | | mean WPE | Response Rate | Bush | Kerry | Bush | Kerry |
| 0< Bush <=20% | 80< Kerry <=100% | 0.3% | 53% | 10% | 90% | 53.8% | 52.9% |
| 20< Bush <=40% | 60< Kerry <=80% | -5.9% | 55% | 30% | 70% | 49.6% | 57.3% |
| 40< Bush <=60% | 40< Kerry <=60% | -8.5% | 52% | 50% | 50% | 47.6% | 56.4% |
| 60< Bush <=80% | 20< Kerry <=40% | -6.1% | 55% | 70% | 30% | 52.6% | 60.6% |
| 80< Bush <=100% | 0< Kerry <=20% | -10.0% | 56% | 90% | 10% | 52.9% | 64.0% |

The visual chart is below.

Required Response Rate by Partisanship of Precincts

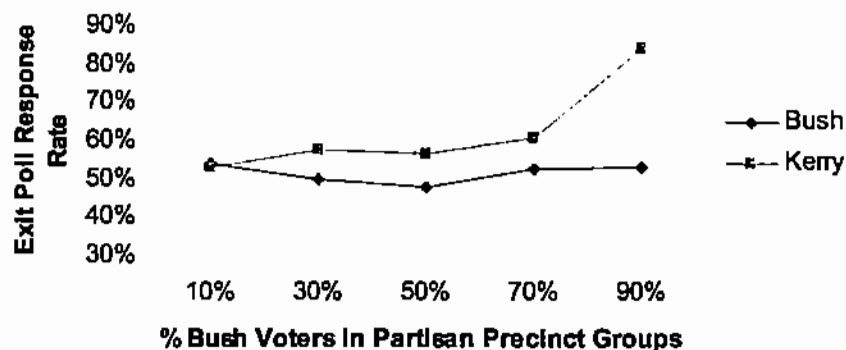


Chart based on Table 2 above

Notice, that to reconcile the “Edison/Mitofsky Partisanship Precinct” data (Table 2) three oddities must occur:

1. There must have been a *very* large spread of response rates of 31% for Kerry supporters from a low of 52.9% to a high of 84% - that is *five times* greater than the spread among Bush supporters of only 6%, from a low of 47.6% to a high of 53.8%.
2. Kerry voters must have responded their highest of 84% in *Bush strongholds*, while responding least, 53%, in Kerry strongholds.
3. The difference in response rates between Bush and Kerry voters must be over 30% in Bush strongholds, much higher than the 6% overall response rate difference suggested by Edison/Mitofsky and much higher than the WPE.

This data contradicts previous experience and observations of this election that voters finding themselves in the minority in a local venue (and particularly a dwarfed minority) tend to be *less* willing to respond to exit poll interviewers, not more as this data requires. Certainly we would not expect the Kerry voter response rate to soar to over 84% in precincts where Bush voters outnumber them by *at least* four-to-one. Conversely, we would not expect the Kerry voter response rate to be at its lowest (53%) in precincts where Kerry voters were most numerous.

One might reasonably ask if such oddities persist when employing other assumptions of the percentage of Bush and Kerry voters in each partisan precinct grouping. The answer is “Yes” as we show in Appendix A.

The required pattern of exit poll participation by Kerry and Bush voters to satisfy the E/M exit poll data defies empirical experience and common sense under any assumed scenario.

Implausible Patterns of Exit Poll Participation as a Proportion of Those Asked to Take the Polls Are Needed to Satisfy E/M's data.

In the prior section, we computed the response rates as a proportion of those in the *sample* who completed the exit poll - not the proportion of those who were actually invited to respond. Now we calculate the Kerry and Bush voter response rates as a proportion of those actually asked to complete the exit poll.

A voter was “*missed*” if he or she could not be approached, perhaps when a cluster emerges from the voting area together and only a limited few can be approached. Edison/Mitofsky define the “*miss rate*” as the percentage of those voters who *should have* been interviewed according to the selection rule, but were not¹³. In each precinct partisanship grouping:

$$\text{Miss Rate} + \text{Completion/Response Rate} + \text{Refusal Rate} = 100\%.$$

It is reasonable to assume that voters were missed more or less at random so we can assume that the miss rates are roughly the same for Bush and Kerry supporters. The fact that the miss rate is constant across precinct types while the refusal and response rates are not (according to the Edison/Mitofsky explanation) suggests that the miss rate cannot be highly correlated with the refusal or response rates.

Kerry and Bush response rates calculated as a proportion of those who were asked to take the polls are similarly *implausible*.

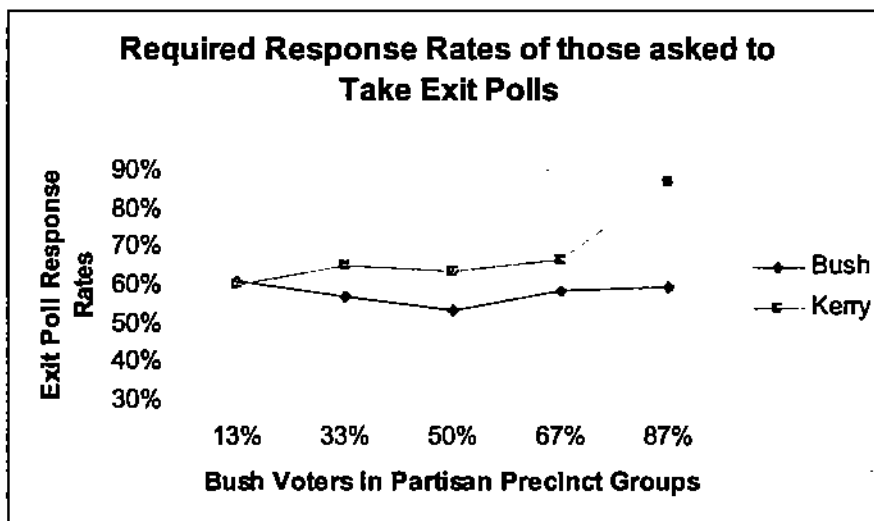


Chart based on Appendix A: Table 3 - includes adjustment for “miss rate”

The above chart uses the normal curve to select likely Kerry and Bush voter ratios within partisan precinct groupings. The range in the calculated required response rate among Kerry voters of 27% is over three times that of the range in response of 7.46% of Bush voters! The differences in response rates between Bush and Kerry voters in any partisan group having significant mean WPEs, are greater than the 6% overall, and are also greater than the mean WPEs for each partisan group.¹⁴

¹³ Exit poll selection rules instruct exit poll field staff to, for example, “interview every 10th voter”.

¹⁴ See Appendix A

E/M's exit poll data not only requires a "reluctant Bush responder" syndrome, it also requires a "high range of Kerry voters response rates that varies far more than Bush voters" plus a "Kerry voters respond most in Bush strongholds" theory.

Once again, there is an implausible set of required response rates for Kerry and Bush supporters given the Edison/Mitofsky precinct partisanship data in Table 1.

Very Implausible Patterns of Exit Poll Participation Are Required to Satisfy E/M's data in 80-100% Bush Precincts.

One clue in the E/M data offers insight into a possible cause of the discrepancies they report: *The Mean vs. the Median in Bush Strongholds*

In 80-100% Bush strongholds the Median WPE of -5.9% is very different from the Mean WPE of -10.0%. This suggests that the mean in these Bush strongholds was pulled up by a small number of precincts with extremely high WPEs. For this to occur there must have been some precincts in which the WPE was very negative and the exit poll estimated a *much* bigger vote for Kerry than the election results recorded. Because the median WPE is -5.8%, we know that in half these precincts the error was less than -5.8%. Therefore, the WPE discrepancy in half of the data must conservatively be estimated to be at least average -14.2% WPE¹⁵.

The following table shows the required response rates calculated for these "high-Bush" precincts.

| Table 5: Sample Calculated Required Bush & Kerry Response Rates in Bush strongholds sampled which had over -14.2% WPE discrepancies | | | | Assumed % of Kerry/Bush voters in partisan precincts | | Required Response Rates for entire sample | | Required Response Rates of voters who were asked to take the exit poll | |
|---|----------------|------------|-----------------|--|---------|---|---------|--|---------|
| Partisanship of Precinct based on Election Results | | mean WPE E | Response Rate R | Bush b | Kerry k | Bush B | Kerry K | Bush B | Kerry K |
| 80< Bush <=100% | 0< Kerry <=20% | -14.2% | 58% | 91% | 9% | 51.63% | 100.18% | 58.7% | 113.8% |
| 80< Bush <=100% | 0< Kerry <=20% | -14.2% | 58% | 88% | 12% | 51.48% | 89.13% | 58.5% | 101.3% |
| 80< Bush <=100% | 0< Kerry <=20% | -14.2% | 56% | 86% | 14% | 51.38% | 84.40% | 57.7% | 94.8% |
| 80< Bush <=100% | 0< Kerry <=20% | -14.2% | 56% | 83% | 17% | 51.21% | 79.39% | 56.9% | 88.2% |
| 80< Bush <=100% | 0< Kerry <=20% | -14.2% | 56% | 81% | 19% | 51.09% | 76.93% | 57.4% | 86.4% |

In these "high-Bush" stronghold precincts for which the exit polls must have under-estimated the margin between Bush and Kerry by at least 14.2%, the minimum Kerry supporter response rates under these very conservative mathematical estimates would be higher than **86%** of those who were asked to take the poll. The corresponding Bush supporter response rate would be only 57.4% - a huge gap of 29% that is totally at odds with empirical experience. The difference in response rates for Bush and Kerry voters conservatively must exceed 25% and is in all cases much higher than the WPEs.

¹⁵ There were 40 precincts with mean error of -10.0% which gives a total error sum of -400; -5.8% as a median divides the precincts into two sets of 20; assume the top half error is the highest possible (20 x -5.8% = -116); this leaves -284 for the bottom half; -284/20 = -14.2%. Clearly there were some highly skewed precincts in the Bush strongholds, although the 20 precincts (in a sample of 1250) represent only about 1.6% of the total.

Edison/Mitofsky's data may be better explained by the hypothesis that vote-counting anomalies occurred disproportionately in "high-Bush" precincts. To help test this hypothesis, in the absence of E/M's raw data, US Count Votes is planning an in-depth statistical analysis of precincts with high Bush and high Kerry vote totals once our new nationwide precinct-level vote database is complete.

When Edison/Mitofsky's explanation is checked against their own data using conservative assumptions, it requires highly suspect Kerry voter exit poll behaviors in "high-Bush" precincts.

Even When Using Assumptions that Minimize the Differences between Bush and Kerry Response Rates, Participation Patterns Remain Implausible.

In the absence of Edison/Mitofsky's raw data, our calculations in Section C above were based on several different estimates of the mean official vote tally (percentage of Bush and Kerry voters) in each partisan class of sample precincts. It is reasonable to check to see whether there is *any* assumed mean value of the official vote counts that minimize the inexplicable differences between Bush and Kerry response rates cited above. Our calculations in Appendix A, Table 4 minimize the differences but in doing so it requires:

1. Response rates of Kerry *and* Bush voters that both vary widely by partisanship of precincts. The spread of response rates for Kerry and Bush voters must be 18% and 14% respectively.
2. Response rates of Kerry *and* Bush voters that both are at their *highest* in strongholds of the opposing candidate!

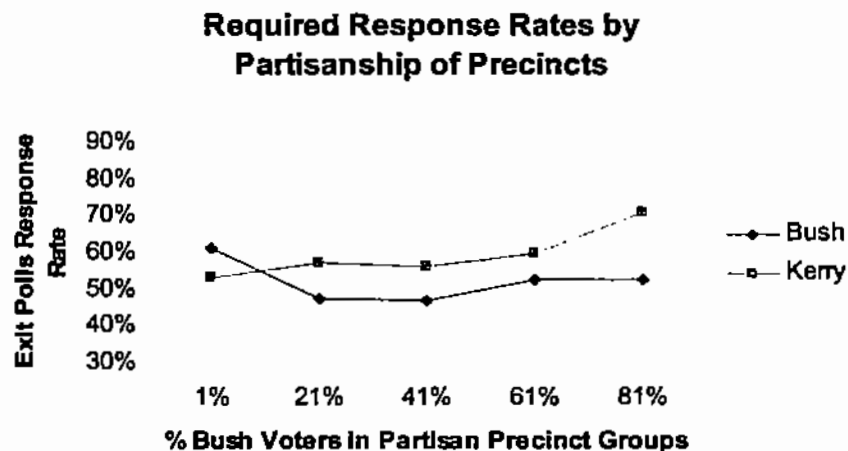


Chart based on Appendix A: Table 4

In order to make the Bush voter exit poll response pattern correspond to the Kerry voter exit poll response pattern, we had to reduce the proportion of Bush supporters in each type of precinct to the bare minimum.

Very surprising patterns of partisan response rates to exit polls are required by both Kerry and Bush voters when we select values to minimize the differences between Bush and Kerry voters' exit poll response rates.

In sum, there are no values of proportions of Bush and Kerry voters which can be chosen that would result in plausible response rate patterns, and that satisfy the exit poll data given by E/M.

D. The Same Exit Polls More Accurately Projected the Senate Races

The Senate and presidential races were both questions on a single exit poll survey. If Bush supporters were refusing to fill out this survey as hypothesized, the accuracy of the exit poll should have been just as poor in the Senate races as it was in the presidential race. The presidential and Senate poll results derive from exactly the same responders.

In 32 states, Senate elections took place on the same ballot with the presidential race. The exit polls were more accurate for Senate races than for the presidential race, including states where a Republican senator eventually won (pages 19-24).

The Senate polls were significantly more accurate: paired t-test, $t(30) = -2.48$, $p < .02$, if outlier North Dakota is excluded. Therefore the Mitofsky/Edison hypothesis of reluctant Bush poll responders is irrelevant to explain the discrepancies between the exit poll and election results in the presidential race.

This difference between the accuracy of the Senate and presidential exit poll is puzzling. Historic data as well as the exit polls themselves indicate that the ticket-splitting rate is low. It is reasonable to expect that the same voters who voted for Kerry were also the mainstay of support for the Democratic candidates in the Senate.

Why should polls based on these same participants be more accurate in predicting Senate results than in predicting the presidential vote? In the absence of raw, unadjusted precinct level exit poll data, this question may best be answered by comparative analysis of official precinct-level presidential vote tallies with tallies from Senate and other races. Patterns of anomalies in vote counting in US Senate races should also be searched for, and investigated if found.

There is no logic to account for non-responders or missed voters when discussing the difference in the accuracy of results for the Senate versus the presidential races in the same exit poll.

E. Other Possible Reasons for Exit Poll Bias

Traugott, Highton, and Brady in their study of the exit polls¹⁶ juxtaposed their discussion of the discrepancies between election and exit poll results in the presidential race with their discussion of other causes for WPE (within precinct errors) which were discussed in E/M's report (pp. 37-46), thus implying that these explained the exit poll discrepancies in the presidential race.

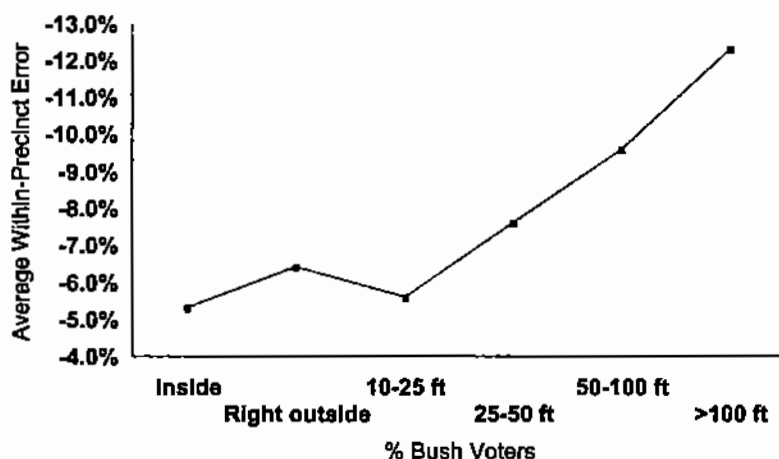
While this data is useful for E/M in planning future polls, but it is almost certainly irrelevant to the 2004 exit poll discrepancy. Here is a table of the highest and "lowest" WPEs for each factor given by E/M.

Table 6: Other Factors with influence amount of WPE (within precinct error)

| | Other Factors Related to WPE | Lowest overall mean WPE | Highest mean WPE |
|----|--|---------------------------------|-------------------|
| 1 | distance from polling location | -5.3 (within the poll location) | -12.3 |
| 2 | possible to approach every voter? | -6.0 (yes) | -8.0 (no) |
| 3 | cooperative precinct officials | -6.4 (yes) | -8.0 (no) |
| 4 | cooperative voters | -6.2 (yes) | -10.2 (no) |
| 5 | outside interference with interviewing | -5.5 (no) | -6.6 (yes) |
| 6 | population size of town or city | -3.6 (rural) | -8.1 |
| 7 | voting equipment | -2.2 (paper ballot) | -10.6 |
| 8 | weather affected interviews? | -6.2 (no) | -7.3 (yes) |
| 9 | number of precincts per poll. location | -6.3 (1) | -13.6 (4 or more) |
| 10 | precinct in a swing state? | -6.1 (no) | -7.9 (yes) |

First, we notice that even the lowest mean WPE errors for most factors are very high, even in the best of circumstances. We can therefore eliminate most of the above factors from consideration, leaving only population size of town or city, and voting equipment to consider.

Error increases with distance between exit pollster and polling place



¹⁶ <http://elections.ssrc.org/research/ExitPollReport031005.pdf>

For an example of why we can easily eliminate these factors, let us take "distance from polling place". The number of precincts where the pollsters were placed far from the polling station was small. The discrepancies that E/M seek to explain are already fully present even in the precincts where pollsters were optimally placed. Most of this bias is apparent even in the 75% of precincts where the pollster was allowed to conduct his survey just outside or within the building.

Hand counted paper ballots were used primarily in rural districts in only 3% of sampled precincts altogether, so had very little effect on the overall discrepancies. All voting methods produced higher mean WPEs in urban areas with over 50,000 population.

Rural areas constituted 24% of precincts sampled. All other "population size" precinct groups had mean WPE of at least -5.0, with the highest mean WPE of -7.9 in suburbs which constituted 39% of precincts.

No other factors relating to WPE (within precinct error) were given in the Edison/Mitofsky report that would explain the systematic discrepancies between the election results and the exit poll results in the presidential race.

III. Explanation #Three - Inaccurate Election Results

If the discrepancies between exit poll and election results cannot be explained by random sampling error; the "Reluctant Bush Responder" hypothesis is inconsistent with the data; and other exit polling errors are insufficient to explain the large exit polling discrepancies, then the only remaining explanation – that the official vote count was corrupted – must be seriously considered.

Edison/ Mitofsky say in their Executive Summary (p. 3), "Exit polls do not support allegations of fraud ..." but they do not seriously consider the hypothesis of election fraud. Instead, E/M use the word "error" consistently to analyze potential problems with the *exit polls*, always assuming the correctness of the *election results* without providing supporting evidence for that assumption.

The E/M exit poll report shows differences in WPE for different types of voting equipment (p. 40). Precincts with paper ballots, used primarily in rural precincts, showed a median WPE of -0.9, consistent with chance, while all other technologies were associated with unexplained high WPE discrepancies between election and exit poll results:

Table 7: Median WPE by voting equipment

| Type of equipment used at polling place | Median WPE Overall |
|---|--------------------|
| Paper ballot | -0.9 |
| Mechanical voting machine | -10.3 |
| Touch screen | -7.0 |
| Punch cards | -7.3 |
| Optical scan | -5.5 |

There is the possibility that errors for all four automated voting systems could derive from errors in

the election results. Regrettably, Edison/Mitofsky fail to specify P-values, significance levels, or the statistical method by which they arrived at their conclusion that voting machine type is not related to WPE, and their breakdown for voting equipment ignores whether results are tallied in the precinct or at a central location. Further, they do not provide the raw data by which one might evaluate that conclusion. The Edison/Mitofsky report does not report having done an ANOVA of voting machine type that might confirm their claim that there is no difference between precincts using different voting machines.

A limited study of New Mexico's detailed precinct level vote type election results showed that pushbutton digital recording electronic (DRE) voting machines in New Mexico produced significantly higher rates of under-votes in the presidential race in election day voting, than did New Mexico's optical scan voting machines.¹⁷ Similar audits of other states' election results are needed.

The many anecdotal reports of voting irregularities¹⁸ create a context in which the possibility that the overall vote count was substantially corrupted must be taken seriously. The hypothesis that the discrepancy between the exit polls and election results is due to errors in the official election tally remains a coherent theory.

IV. Misleading Use of Adjusted Exit Poll Data

The important distinctions between "weighting" and "adjusting" exit poll data must be made in our analysis.

"Weighting" involves comparison of raw exit poll data with known or consistently estimated parameters such as race and gender breakdown of the electorate. The raw data is weighted to better conform to the demographic composition of the electorate, and there is general agreement that such weighting, or "stratification," produces greater accuracy in the exit poll results by diminishing the effects of both sampling error and skewing (e.g., differential response levels by race or gender or age group).

"Adjusting," "re-weighting," "renormalization," or "forcing" of exit poll data is also a weighting process but one which involves the use of *tabulated vote counts*, to which the already demographically weighted exit poll results are brought into congruence. Once the polls have closed and tabulated results become available, first at the precinct and then at the county level, Edison/Mitofsky's exit poll results are adjusted to mirror these tabulated results. Thus, it has been stated, "What you would get after the election are preference [i.e., exit poll] numbers forced to the election result."¹⁹ Such adjustment of exit polls results to congruence with incoming tabulated election results did indeed take place late on election night 2004, and was posted to media websites during the hour or so after

¹⁷ http://electionarchive.org/ucvAnalysis/NM/NMAnalysis_EL_JM.pdf

¹⁸ Election Incident Reporting System (EIRS)

<http://www.electionincidentreporting.com/> The Election Incident Reporting System (EIRS) records more than 27,000 incidents, for example.

¹⁹ Email from mitofsky@electionarchive.com to greg@electionarchive.com, 10/17/04.

approximately 12:24 a.m. on November 3, 2004. These adjusted results remain posted, as of this writing.²⁰ The demographically weighted results available prior to this adjustment will be referred to as “unadjusted.”

Many have questioned whether this process was in itself sinister, *designed* to conceal troubling questions about vote counting in Election 2004 as revealed by the unadjusted exit poll results. The answer is almost certainly no. And yet the *effect* of the process was at the very least confusing and served to blunt public awareness of the dramatic exit poll-vote count discrepancies during the critical period immediately following the election.

While we acknowledge that *slight* adjustment may legitimately be made to exit polls using the reported election results, so that the results can be used to assess the demographics and opinions underlying the reported voter shares in a consistent fashion, *the justification for doing so rests entirely on the assumption that the reported election results are in fact accurate*, as reflected by a small and undramatic discrepancy between exit poll results and vote counts. In order for the exit poll results in 2004 to be used in this manner they had to be substantially, in fact dramatically, adjusted. Such substantial discrepancies and the need for such dramatic adjustment raised a bright red flag. Edison/Mitofsky ignored this red flag and simply substituted the adjusted data set, which has been generally employed without acknowledgement.

This practice continues in Edison/Mitofsky's report. The National Exit Poll (NEP) data given on pp. 60-61 and again on p. 65 was adjusted to correspond to the official vote count. This adjusted data continues to be highly misleading. For example, Adam Nagourney writing in The New York Times²¹ apparently unknowingly used this adjusted report data to make the major, and erroneous, point that for the first time the Republican share of the electorate equaled the Democratic (37%-37%). The actual unadjusted exit poll data showed a Democratic share of 38% to Republican 35%. Promulgating multiple and not clearly delineated data sets raises the level of general confusion and detracts from the credibility of the salient data sets and results.

Fortunately a demographically weighted, unadjusted data set has been available for analysis since November 3, 2004. (See Appendix B.) CNN screen shots of exit poll data were downloaded by Jonathan Simon and others from 12:17 to 12:24 AM ET on Nov. 3, 2004.²² It is an open question whether, in the absence of this somewhat fortuitous data capture, either the vote counts themselves or the exit poll results adjusted to mirror them would have been called into question, and whether any of the unadjusted data sets would have come to light. To the best of our knowledge the Simon screen shots—that are marked as having been updated from 12:17 to 12:24 AM ET and referred to as the “Simon data”²³—reflect the final demographically weighted exit poll data available before these data

²⁰ See, e.g., <http://www.cnn.com/ELECTION/2004/nov/poll/president/states.ct.html>; this is the page for Connecticut; for other states, substitute the appropriate state abbreviation for “CT” in the url above.

²¹ New York Times, January 24, 2005

²² Copies of these screen shots are posted at: <http://www.cnn.com>. This unadjusted data remained posted to web sites such as <http://www.cnn.com> at that late hour reportedly (and ironically) as a result of a computer problem with a server at Edison.

²³ For a summary of the Simon data see “Exit Poll Prediction” column p. 36-38 of Baiman, Ron affidavit at <http://www.cnn.com/2004/11/03/04.election.poll/index.html>. It should be noted that Simon was unable to capture unadjusted data for four states (NJ, NY, NC, and VA). For the states of Connecticut, Florida, and Ohio, Simon was captured both unadjusted and adjusted results, all of which show major exit poll adjustments in favor of Bush. In the state on Connecticut, for example, the results changed from 57.7% Kerry/40.9% Bush in the 12:22 a.m. update to 54.7%

were adjusted to conform to the reported election results. Although the E/M report does not acknowledge or explain these CNN screen shots or the data set derived from them, this Simon data corresponds closely with the data sets referred to as "call 3" data and presented by E/M in their report on pp. 21-22²⁴.

E/M employs this "call-3" data set for the presidential election once in their report (table pp. 21-22) and then abandons it entirely, substituting without acknowledgement, the adjusted data set, and thus perpetuating the confusion and misleading impressions created by their original conversion to the adjusted data on the morning of November 3, 2004. We see no constructive reason for E/M's practice in this regard.

It is reasonable to ask Edison/Mitofsky to make publicly available the raw precinct level data and weights used to calculate both their "call-3" and "Simon" data sets, and explain to the public its selective avoidance of these data sets in their report.

Kerry/44.4% Bush in the 12:53 a.m. update, while the number of respondents remained constant at 872. The tabulated results were 54.7% Kerry/44.4% Bush, exactly matching the adjusted poll results.

²⁴ Although the Simon data and call 3 data do not match exactly, in nearly all cases the discrepancies are very minor (within a few tenths of a percentage point, within the bounds of rounding error) and there is no statistically significant pattern of overstatement or understatement. Either the Simon data or the call-3 data may be used without changing the thrust of our analysis that there exists a pattern of statistically significant discrepancy between the exit poll results and vote counts.

Summary

There is already a strong case that there were significant irregularities in the presidential vote count from the 2004 election. Nevertheless, critics are asking for firmer proof before going forward with a thorough investigation²⁵. We feel strongly that this is the wrong standard. One cannot have proof before an investigation.

In fact, the burden of proof should be to show that the election process is accurate and fair. The integrity of the American electoral system can and should be beyond reproach. Citizens in the world's oldest and greatest democracy should be provided every assurance that the mechanisms they have put in place to count our votes are fair and accurate. The legitimacy of our elected leaders depends upon it.

Well-documented security vulnerabilities and accuracy issues have affected voting equipment as far back as the late 1960s²⁶, and history shows that partisan election officials have long possessed the power to suppress and otherwise distort the vote counts²⁷. The recent and ongoing proliferation of sophisticated computerized vote recording and tallying equipment²⁸, much of it unverifiable and hence "faith-based", dramatically augments the opportunities for wholesale and outcome-determinative distortions of the vote counting process. That the lion's share of this equipment is developed, provided, and serviced by partisan private corporations only amplifies these serious concerns. The fact that, in the 2004 election, all voting equipment technologies except paper ballots were associated with large unexplained exit poll discrepancies *all favoring the same party* certainly warrants further inquiry.

The absence of any statistically-plausible explanation for the discrepancy between Edison/Mitofsky's exit poll data and the official presidential vote tally is an unanswered question of vital national importance that demands a thorough and unflinching investigation.

US Count Votes is a Utah non-profit corporation. Its goal is to provide nationwide, impartial statistical auditing services to help ensure the accuracy of future elections. US Count Votes is sponsoring the "National Election Data Archive" project in order to collect detailed election data and, prior to November 2006, develop statistical methods to audit elections results data and provide statistical evidence of vote tabulation errors immediately following any US election.

²⁵ See for example <http://elections.senate.gov/record/110/04/01/20040101>

²⁶ Harris, B. "Black Box Voting: Ballot Tampering in the 21st Century (Talion Publishing, March, 2004): Chapter 2, "Can We Trust These Machines?" <http://www.blackboxvoting.org/doc/Chapter2.pdf> contains an extensive list of primary source citations

²⁷ See for example <http://electionarchive.org/doc/20040101/20040101.html>

²⁸ In November 2004 mechanical vote tallying systems, easily tampered with locally, also continue to be used and show high mean WPEs for precincts using them, according to Edison/Mitofsky's report.

Appendix A: Voter Response Rate Calculations

Calculated Kerry and Bush voters response rates required to reconcile Edison/Mitofsky's Partisanship Precinct data as given in Table 1.

We assume that there are no significant differences in precinct size between the various precinct groupings by partisanship. For any assumed percentage of Bush and Kerry voters within any partisanship precinct group, there exist equations where the unknowns are "the response rate for Bush voters" and "the response rate of Kerry voters" that have a single solution.

For Each Partisan Precinct Grouping we let:

K = Kerry voter response rate that we want to solve for (out of the sample)
B = Bush voter response rate that we want to solve for (out of the sample)
k = % of Kerry voters in the precinct grouping that we assume for the calculation
b = % of Bush voters in the precinct grouping that we assume for the calculation
R = overall response rate given by E/M within each precinct grouping
n = the number of voters in each precinct grouping
E = the mean WPE error given by E/M for that precinct grouping
m = the miss rate given by E/M

Calculation of Bush and Kerry response rates as a proportion of the *sample*:

kn = number of Kerry voters in the precinct grouping

bn = number of Bush voters in the precinct grouping

knK = number of Kerry voters in the sample who responded to exit polls

bnB = number of Bush voters in the sample who responded to the exit polls

Rn = Total number of voters who completed the exit poll in the precinct grouping

(number of Kerry voters) / (total number of voters) = ratio of Kerry voters who responded to polls

$k - .5E$ = ratio of Kerry voters who responded to exit polls according to the WPE discrepancy

$b + .5E$ = ratio of Bush voters who responded to exit polls according to the WPE discrepancy

Note also that $k + b = 100\%$ and $kK + bB = R$

So, putting it altogether -

$$(nkK) / (Rn) = k - .5E \quad \text{and} \quad (nbB) / (Rn) = b + .5E$$

Solving for K and B we obtain:

$$K = (k - .5E)(R/k) \quad \text{and} \quad B = (b + .5E)(R/b)$$

Calculation of Bush and Kerry response rates as a proportion of voters asked:

K = Kerry voter response rate that we want to solve for (out of those asked)

B = Bush voter response rate that we want to solve for (out of those asked)

knK(1-m) = number of Kerry voters who were asked and who responded to exit polls

bnB(1-m) = number of Bush voters who were asked and who responded to the exit polls

So, putting it altogether -

$$nkK(1-m) / (Rn) = k - .5E \quad \text{and} \quad nbB(1-m) / (Rn) = b + .5E$$

Solving for K and B we obtain:

$$K = (k - .5E)(R/k(1-m)) \quad \text{and} \quad B = (b + .5E)(R/b(1-m))$$

On the next page are three tables of calculated required response rates for Bush and Kerry voters under different assumed proportions of Bush and Kerry voters in each partisanship precinct group. One can see that any assumption leads to implausible response rates.

Table 2: Assume Midpoints - Bush/Kerry ratios of 10:90, 30:70, 50:50, 70:30, 90:10

| Table 2: Calculated Required Bush & Kerry Response Rates using midpoints of precinct intervals as the assumed Bush/Kerry voter percentages in partisan precincts. | | | | Assumed % of Kerry/Bush voters in partisan precincts | | Required Response Rates for entire sample | | Required Response Rates of voters who were asked to take the exit poll | |
|---|------------------|----------|---------------|--|-------|---|-------|--|-------|
| Partisanship of Precinct based on Election Results | | mean WPE | Response Rate | Bush | Kerry | Bush | Kerry | Bush | Kerry |
| 0< Bush <=20% | 80< Kerry <=100% | 0.3% | 53% | 10% | 90% | 53.8% | 52.9% | 61.1% | 60.1% |
| 20< Bush <=40% | 60< Kerry <=80% | -5.9% | 55% | 30% | 70% | 49.6% | 57.3% | 56.4% | 65.1% |
| 40< Bush <=60% | 40< Kerry <=60% | -8.5% | 52% | 50% | 50% | 47.6% | 56.4% | 53.5% | 63.4% |
| 60< Bush <=80% | 20< Kerry <=40% | -6.1% | 55% | 70% | 30% | 52.6% | 60.6% | 58.4% | 67.3% |
| 80< Bush <=100% | 0< Kerry <=20% | -10.0% | 56% | 90% | 10% | 52.9% | 84.0% | 59.4% | 94.4% |

Table 3: Assume Normal Curve - Bush Kerry ratios of 13:87, 33:67, 50:50, 67:33, 87:13

| Table 3: Calculated Required Bush & Kerry Response Rates using the normal curve to locate likely values to assume for Bush/Kerry voter percentages in partisan precincts. | | | | Assumed % of Kerry/Bush voters in partisan precincts | | Required Response Rates for entire sample | | Required Response Rates of voters who were asked to take the exit poll | |
|---|------------------|----------|---------------|--|---------|---|---------|--|---------|
| Partisanship of Precinct by Election Results | | mean WPE | Response Rate | Bush b | Kerry k | Bush B | Kerry K | Bush B | Kerry K |
| 0< Bush <=20% | 80< Kerry <=100% | 0.3% | 53% | 13% | 87% | 53.61% | 52.91% | 60.9% | 60.1% |
| 20< Bush <=40% | 60< Kerry <=80% | -5.9% | 55% | 33% | 67% | 50.08% | 57.42% | 56.9% | 65.3% |
| 40< Bush <=60% | 40< Kerry <=60% | -8.5% | 52% | 50% | 50% | 47.58% | 56.42% | 53.5% | 63.4% |
| 60< Bush <=80% | 20< Kerry <=40% | -6.1% | 55% | 67% | 33% | 52.50% | 60.08% | 58.3% | 66.8% |
| 80< Bush <=100% | 0< Kerry <=20% | -10.0% | 56% | 87% | 13% | 52.78% | 77.54% | 59.3% | 87.1% |

Table 4: Assume Arbitrary Minimizing - Bush/Kerry ratios of 1:99, 21:79, 41:59, 61:39, 81:19

| Table 4: Calculated Required Bush & Kerry Response Rates using arbitrary assumed values of Bush/Kerry voter percentages in partisan precincts that minimize Bush/Kerry response rate differences. | | | | Assumed % of Kerry/Bush voters in partisan precincts | | Required Response Rates for entire sample | | Required Response Rates of voters who were asked to take the exit poll | |
|---|------------------|----------|---------------|--|---------|---|---------|--|---------|
| Partisanship of Precinct based on Election Results | | mean WPE | Response Rate | Bush b | Kerry k | Bush B | Kerry K | Bush B | Kerry K |
| 0< Bush <=20% | 80< Kerry <=100% | 0.3% | 53% | 1% | 99% | 60.95% | 52.92% | 69.3% | 60.1% |
| 20< Bush <=40% | 60< Kerry <=80% | -5.9% | 55% | 21% | 79% | 47.27% | 57.05% | 53.7% | 64.8% |
| 40< Bush <=60% | 40< Kerry <=60% | -8.5% | 52% | 41% | 59% | 46.61% | 55.75% | 52.4% | 62.6% |
| 60< Bush <=80% | 20< Kerry <=40% | -6.1% | 55% | 61% | 39% | 52.25% | 59.30% | 58.1% | 65.9% |
| 80< Bush <=100% | 0< Kerry <=20% | -10.0% | 56% | 81% | 19% | 52.54% | 70.74% | 59.0% | 79.5% |

Appendix B:

WPE and Differential Partisan Response

WPE is a poor measure of "differential response by party" as its magnitude is affected by the partisan composition of the precinct (k or b) and by the overall response rate (R), in addition to the relative response to exit pollsters by members of each party.²⁹ This can be seen by inspecting Tables 2-4 above. The difference between Bush and Kerry voter response rates and mean WPE, increases as precincts become more partisan. This is because, in addition to differential response by party, overall response rates and partisan composition affect WPE

This can be seen by setting $K = r - .5w$ and $B = r + .5w$, where w is "differential response by party" and r is "mean response by party", and substituting these into the solutions for K and B in Appendix A, to get the following two equation system for r and w :

$$(k - .5E)(R/k) = r - .5w$$

$$(b + .5E)(R/b) = r + .5w$$

The solution of this system for w is:

$$w = (R/b)(b + E/2) + (R/k)(E/2 - k)$$

so that when $b + k = 1$, as we assume in this report (neglecting the response of "independent voters" who made up 1% or so of the national electorate) we get:

$$w = (RE/2)(1/b(1 - b)) = (RE/2)(1/k(1 - k)) \quad \text{or conversely:}$$

$$E = (2w/R)b(1-b) = (2w/R)k(1-k)$$

From this equation we see that E , or WPE, is not only determined by the "partisan response differential", w , but also by k or b , and R . More competitive precincts, and precincts with lower overall response rates, will have higher absolute WPE simply because of the mathematical effects of b , or k , and R , on the relationship between w and E .

"Differential response by party", w , will *not* be equal to E unless

$(2/R)k(1-k) = (2/R)b(1-b) = 1$. For a perfectly competitive precinct ($b = k = .5$) $E = (.5/R)w$, its maximum value. If in addition $R = .5$ then $E = w$.

This suggests that the WPE's listed in Tables 2-4 of our report substantially understate differential response by party, especially for partisan districts. As we have shown, w has to be very, and implausibly, large in all cases, if E is to be explained.

Moreover, this analysis suggests that if there is a pervasive and more or less constant bias in exit polling because of a differential response by party, WPE should be greatest for more balanced precincts and fall as precincts become more partisan. The data presented on p. 36, 37 of the E/M report and displayed in Table 1 of our report above, show that this is the case *for all except the most highly partisan Bush precincts for which WPE dramatically increases to -10.0%. Our calculations above show the differential partisan response necessary to generate this level of WPE in these precincts*

²⁹ We thank Elizabeth Liddle, of the University of Nottingham, U.K., for calling our attention to the effect of precinct partisanship on the relationship between differential partisan response and WPE. We take full responsibility for the derivations and conclusions that we have arrived at from analyzing this pattern in this Appendix.

ranges from 40% (Table 2) to an absolute minimum of 20.5% (Table 4). These results would appear to lend further support to the "Bush Strongholds have More Vote-Corruption" (Bsvcc) hypothesis discussed in Section B of our report, and to the discussion of the "Very Implausible Patterns of Exit Poll Participation Are Required to Satisfy E/M's data in 80-100% Bush Precincts."

Signed WPE versus Absolute WPE in partisan precincts

It should also be noted that the next to last column of the precinct partisanship table (p. 36 of E/M report) shows that the mean absolute value WPE (unsigned WPE) for highly partisan Bush precincts declines to 12.4 % for highly partisan Republican precincts relative to less partisan (13.2% and 13.4%) and more balanced precincts (15.2%). Only highly partisan Kerry precincts have a lower mean absolute value WPE of 8.8%.

Comparing this data to the mean WPE data in Table 2 of our report shows that:

a) Highly Kerry precincts had large absolute value WPE's (totaling 8.8%) but these included both pro-Kerry and pro-Bush discrepancies that off-set each other so that the average (signed) WPE was only 0.3%. Pro-Bush bias was just about offset by pro-Kerry bias in these precincts, as one would expect for random sampling bias and random measurement error.

b) A somewhat similar, but less balanced, pattern occurred in less partisan precincts as in these precincts (signed) WPE, though consistently negative, was roughly half the magnitude of mean absolute value WPE (-5.5 and 13.4, -8.3 and 15.2, -6.1 and 13.2, respectively). This suggests that in these precincts about half of pro-Kerry exit poll bias was off-set by pro-Bush exit poll bias. This is not what one would expect from random exit poll bias and measurement error but at least moves in the expected direction.

c) The dramatic and unexpected increase in (signed) mean WPE in highly Bush precincts of -10.0%, noted above, is also unexpectedly close to mean absolute value WPE (12.4%) in these precincts. *This suggests that the jump in (signed) WPE in highly partisan Bush precincts occurred primarily because (signed) WPE discrepancies in these precincts were, unlike in a) above and much more so than in b) above, overwhelmingly one-sided negative overstatements of Kerry's vote share.*

These results lend further support to the "Bush Strongholds have more Vote-Corruption" (Bsvcc) hypothesis discussed in Section B of our report, and to the discussion of the "Very Implausible Patterns of Exit Poll Participation Are Required to Satisfy E/M's data in 80-100% Bush Precincts".

It is reasonable to ask Edison/Mitofsky to explain why signed WPE in highly partisan precincts is not lower than in less partisan precincts as would be mathematically expected, and where this dramatic increase in one-sided WPE in highly Bush precincts and significant increases in one-sided WPE in more partisan precincts, both of which are at odds with the more or less random pattern of signed WPE error in highly Kerry precincts, comes from.

Appendix C: Jonathan Simon Exit Poll Data - Downloaded from CNN and similar to the "Call-3" data in Edison/Mitofsky's Report on pp. 21-22

| BREAKDOWN OF EXIT POLLING AND VOTE TABULATION - PRESIDENTIAL ELECTION 2004 | | | | | | | | |
|--|---------------|-----------------|-----------------|------------------|----------------|-----------------|-------------|-----------------|
| State Venue | # Respondents | UpdateTime (ET) | Bush Exit Poll% | Kerry Exit Poll% | Bush Election% | Kerry Election% | Red Shift%* | Type Of State |
| National Vote | 13047 | 12:23 AM | 48.2 | 50.8 | 50.9 | 48.1 | 2.7 | N/A |
| Alabama | 730 | 12:17 AM | 58.1 | 40.5 | 63 | 37 | 4.2 | Safe |
| Alaska | 910 | 1:00 AM | 57.8 | 38.8 | 62 | 35 | 4 | Safe |
| Arizona | 1859 | 12:19 AM | 52.8 | 46.7 | 55 | 44 | 2.5 | Safe |
| Arkansas | 1402 | 12:22 AM | 52.9 | 46.1 | 54 | 45 | 1.1 | Safe |
| California | 1919 | 12:23 AM | 43.4 | 54.6 | 45 | 54 | 1.1 | Safe |
| Colorado | 2515 | 12:24 AM | 49.9 | 48.1 | 52 | 47 | 1.6 | Battleground |
| Connecticut(1) | 872 | 12:22 AM | 40.9 | 57.7 | 44 | 54 | 3.4 | Safe |
| Connecticut(2) | 872 | 12:53 AM | 44.4 | 54.7 | 44 | 54 | 0.2 | Safe |
| DistColumbia | 795 | 12:22 AM | 8.2 | 89.8 | 9 | 90 | 0.3 | Safe |
| Delaware | 770 | 12:22 AM | 40.7 | 57.3 | 46 | 53 | 4.8 | Safe |
| Florida(1) | 2846 | 8:40 PM | 49.8 | 49.7 | 52 | 47 | 2.5 | Critical(Early) |
| Florida(2) | 2846 | 12:21 AM | 49.8 | 49.7 | 52 | 47 | 2.5 | Critical |
| Florida(3) | 2862 | 1:01 AM | 51.4 | 47.6 | 52 | 47 | 0.6 | Critical(Late) |
| Georgia | 1536 | 12:22 AM | 56.6 | 42.9 | 58 | 41 | 1.7 | Safe/Suspect |
| Hawaii | 499 | 12:22 AM | 46.7 | 53.3 | 45 | 54 | -1.2 | Safe |
| Idaho | 559 | 12:22 AM | 65.7 | 32.9 | 68 | 30 | 2.6 | Safe |
| Illinois | 1392 | 12:23 AM | 42.4 | 56.6 | 45 | 55 | 2.1 | Safe |
| Indiana | 926 | 12:22 AM | 58.4 | 40.6 | 60 | 39 | 1.6 | Safe |
| Iowa | 2502 | 12:23 AM | 48.4 | 49.7 | 50 | 49 | 2 | Battleground |
| Kansas | 654 | 12:22 AM | 64.5 | 34.1 | 62 | 37 | -2.7 | Safe |
| Kentucky | 1034 | 12:22 AM | 58.4 | 40.2 | 60 | 40 | 0.9 | Safe |
| Louisiana | 1669 | 12:21 AM | 54.7 | 43.9 | 57 | 42 | 2.1 | Safe |
| Maine | 1968 | 12:22 AM | 44.3 | 53.8 | 45 | 54 | 0.3 | Safe |
| Maryland | 1000 | 12:22 AM | 42.3 | 56.2 | 43 | 56 | 0.5 | Safe |
| Massachusetts | 889 | 12:22 AM | 32.9 | 65.2 | 37 | 62 | 3.7 | Safe |
| Michigan | 2452 | 12:21 AM | 46.5 | 51.5 | 48 | 51 | 1 | Battleground |
| Minnesota | 2178 | 12:23 AM | 44.5 | 53.5 | 48 | 51 | 3 | Battleground |
| Mississippi | 798 | 12:22 AM | 56.5 | 43 | 60 | 40 | 3.3 | Safe |
| Missouri | 2158 | 12:21 AM | 52 | 47 | 54 | 46 | 1.5 | Battleground |
| Montana | 640 | 12:22 AM | 58 | 37.5 | 59 | 39 | -0.3 | Safe |
| Nebraska | 785 | 12:22 AM | 62.5 | 36 | 66 | 33 | 3.3 | Safe/Suspect |
| Nevada | 2116 | 12:23 AM | 47.9 | 49.2 | 51 | 48 | 2.2 | Battleground |
| New Hampshire | 1849 | 12:24 AM | 44.1 | 54.9 | 49 | 50 | 4.9 | Battleground |
| New Jersey | 1520 | 12:50 AM | 46.2 | 52.8 | 46 | 53 | -0.2 | Safe(Late) |
| New Mexico | 1951 | 12:24 AM | 47.5 | 50.1 | 50 | 49 | 1.8 | Battleground |
| New York | 1452 | 12:52 AM | 40.9 | 58.2 | 40 | 58 | -0.4 | Safe(Late) |
| North Carolina | 2167 | 12:48 AM | 56.5 | 42.7 | 56 | 44 | -0.9 | Safe(Late) |

| State Venue | # Respondents | UpdateTime (ET) | Bush Exit Poll% | Kerry Exit Poll% | Bush Election% | Kerry Election% | Red Shift%* | Type Of State |
|----------------|---------------|-----------------|-----------------|------------------|----------------|-----------------|-------------|----------------|
| North Dakota | 649 | 12:22 AM | 64.4 | 32.6 | 63 | 36 | -2.4 | Safe |
| Ohio(1) | 1963 | 7:32 PM | 47.9 | 52.1 | 51 | 49 | 3.1 | Critical |
| Ohio(2) | 2020 | 1:41 AM | 50.9 | 48.6 | 51 | 49 | 0.3 | Critical(Late) |
| Oklahoma | 1539 | 12:23 AM | 65 | 34.6 | 66 | 34 | 0.8 | Safe |
| Oregon | 1064 | 12:22 AM | 47.9 | 50.3 | 48 | 52 | -0.8 | Safe |
| Pennsylvania | 1930 | 12:21 AM | 45.4 | 54.1 | 49 | 51 | 3.4 | Critical |
| Rhode Island | 809 | 12:22 AM | 34.9 | 62.7 | 39 | 60 | 3.4 | Safe |
| South Carolina | 1735 | 12:24 AM | 53.4 | 45.1 | 58 | 41 | 4.4 | Safe |
| South Dakota | 1495 | 12:24 AM | 61 | 36.5 | 60 | 39 | -1.8 | Safe |
| Tennessee | 1774 | 12:23 AM | 58 | 40.6 | 57 | 43 | -1.7 | Safe |
| Texas | 1671 | 12:22 AM | 62.2 | 36.3 | 61 | 38 | -2 | Safe |
| Utah | 796 | 12:22 AM | 68.1 | 29.1 | 71 | 27 | 2.5 | Safe |
| Vermont | 685 | 12:22 AM | 33.3 | 63.7 | 39 | 59 | 5.2 | Safe |
| Virginia | 1431 | 12:56 AM | 54.1 | 45.4 | 54 | 45 | 0.2 | Safe(Late) |
| Washington | 2123 | 12:38 AM | 44 | 54.1 | 46 | 53 | 1.6 | Safe(Late) |
| West Virginia | 1722 | 12:24 AM | 54 | 44.5 | 56 | 43 | 1.8 | Safe |
| Wisconsin | 2223 | 12:21 AM | 48.8 | 49.2 | 49 | 50 | -0.3 | Battleground |
| Wyoming | 684 | 12:22 AM | 65.5 | 30.9 | 69 | 29 | 2.7 | Safe |

*

Red Shift = [(Btab% - Bep%) + (Kep% - Ktab%)]/2 tab= tabulated vote, ep=exit poll

Positive - net movement toward Bush, Negative (blue shift) - net movement toward Kerry

Using Florida (critical) as an example:

Exit Poll % : B=49.8% K=49.7%

Tab (99% precincts) B=52% K=47%

Red Shift: [(52% - 49.8%) + (49.7% - 47%)]/2 = (2.2% + 2.7%)/2 = +2.5%

Appendix D:
Calculation of National Exit Sample Odds

E/M states that there should be a 95% probability that the reported election result will be within 1% of the exit-poll share for exit polls with sample sizes of 8,001 to 15,000. E/M also states that its national exit poll had a sample size of 12,219.³⁰

This information allows us to determine the implied standard deviation for this sample and find what the probability is that the national exit poll would overestimate Kerry's vote share by 2.7%. The odds of this occurring by chance are one in 16,496,696 - see table below:

| National Exit Poll Results | | | | | | | | |
|----------------------------|-------------------|--------|-------------------|--------|-----------------------------------|--|---|---|
| A | B | C | D | E | F | G | H | I |
| | Reported Election | | Exit Poll Results | | | | | |
| | Bush | Kerry | Bush | Kerry | Mitofsky Standard Deviation | Exit Poll Overestim ate of Kerry Vote | Mitofsky Margin of Error with 95% Probability | Mitofsky 5% Confidence Interval Z-Score Probability of Random Occurance |
| | | | | | H/1.96 | E-C | 1% | 1-NORM(E,C,F,True) |
| United States | 50.90% | 48.10% | 48.20% | 50.80% | 0.005102 | 2.70% | 1.00% | 0.000000060493 |
| | | | | | | Odds (1/I) | | 16,530,850 |

³⁰ Methods Statement - National Election Pool Exit Polls by Edison and Mitofsky International, November 2, 2004

See: <http://www.edisonpoll.com/election/pool/MethodsStatement11-2-04.pdf>

ELECTRONIC PRIVACY INFORMATION CENTER**EPIC's Public Information Requests to States on DRE Voting Technology**

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Introduction

The public records requests were submitted to the states of Ohio, Maryland, Florida, Nevada, New Jersey, New Mexico, Pennsylvania, Georgia and Texas. The replies received from states thus far can be found under the heading, "EPIC's DRE Public Information Requests to States." This information is provided as a service to those who would like to learn more about the effort to transition voting technology from punch card and lever voting systems to direct recording electronic (DRE) voting systems. EPIC was successful in gathering information from several states on their acquisition and use of paperless DRE voting technology. The effort continues to seek information from other states on their deliberation and acquisition process for making the switch to paperless DRE voting machines.

With no independent means for voters to verify that their vote is counted as cast a proactive approach already begun by many activists around the nation ask probing questions of policymakers and decision makers about paperless DRE voting technology.

Knowledge is the best defense against fear that voting technology that is deployed for use in the November Election may be flawed. Support for this project would expand on the groundwork already begun for increasing civic and electoral participation by arming citizens with easy to understand descriptions of typical malfunctions found in currently deployed electronic voting technology and effective means for addressing these problems should they arise.

We have accomplished some success in gaining access to these public records and hope that they will be useful to local, state, and national efforts to bring transparency to the process of election administration. However, more needs to be done, and EPIC will continue to seek public records from those states, which have adopted paperless DRE voting systems.

Findings*Lack of Standards*

New standards for voting technology were to be developed by the HAVA law by establishing a 14 member Technology Guidelines Development Committee (under the leadership of the Director of the National Institute of Standards and Technology, which unfortunately received no funding for this effort. The Technical Guidelines Development Committee was named in June 2004, and is in the process of developing voluntary standards for voting technology. Until these new standards are developed the old standards process applies. The current voluntary system of standards established by the Federal Election Commission in 2002, was an update of their 1990 standards, and is viewed as inadequate.

Inadequate Testing of Software

The method of testing paperless DRE voting machines has not been released to the public, but it is known that the process allows for the inclusion of secret code and the use of commercial software products without certification. Computer scientists and engineers, including the California Touch Screen Task Force and Computer Professionals for Social Responsibility, have criticized this method as being extremely inadequate for ensuring election integrity when paperless DRE voting machines are used.

Prone to Defects, Errors, Poor Programming, and Architecture Configuration

While it is nearly impossible to write bug-free software, and studies conducted by Johns Hopkins researchers, Science Application International Corp. and the Raba Technologies each found glaring serious security flaws prior to the State of Maryland finalizing the purchase of the machines from Diebold. Unfortunately the Governor and Secretary of State for Maryland went forward with the purchase of the voting machines.

Vulnerability to Fraud

The Johns Hopkins study found that DRE machine security safeguards are "far below even the most minimal security standards applicable in other contexts." As a result, these systems are vulnerable to both insider and outsider attacks. While improved use of cryptography and security measures could improve some of these flaws, even thorough testing cannot reveal some types of malicious code.

Lack of Auditability

The threat of bugs and security failures are magnified by the fact that none of the DRE machines currently on the market create a hard copy of voters' results, also known as a "paper trail." The lack of a paper record of one's vote makes it impossible to verify if the computer has, indeed, recorded your vote in the system as it is shown on the screen. Furthermore, lack of a paper record makes meaningful recounts or audits impossible because any recount would simply corroborate the same count the computer made the first time and would not catch any errors. Efforts to add a physical audit capacity have been resisted not just by election administrators, but voting rights advocacy organizations.

Lack of Transparency

DRE makers such as Diebold, Sequoia and ES&S refuse to make their software code available to the public to assess, nor are they willing to publicize the kind of testing they perform. California Secretary of State Kevin Shelly testified before the Election Assistance Commission during its first hearing held on May 5, 2004, that Diebold had made the claim that their DRE voting system had passed federal certification, which was later found to untrue. Secretary of State Shelly further stated that when he contacted the certifying laboratory they would not disclose any facts regarding the state of Diebold's application for certification of their DRE voting machines to him, but referred him to the company to respond to his questions.

Not all state Election Administrators are elected, most positions are appointed by the Governor of the state. On the county or local level election administrators are often filled by

- [Unity Election Data Manager User's Guide \(pdf\)](#)
- [Unity Ballot Image Manager User's Guide \(pdf\)](#)
- [Unity Hardware Programming Manager User's Guide Part 1 of 3 \(pdf\)](#)
- [Unity Hardware Programming Manager User's Guide Part 2 of 3 \(pdf\)](#)
- [Unity Hardware Programming Manager User's Guide Part 3 of 3 \(pdf\)](#)
- [Unity Data Acquisition Manager User's Guide \(pdf\)](#)
- [Unity Election Reporting Manager User's Guide Part 1 of 2 \(pdf\)](#)
- [Unity Election Reporting Manager User's Guide Part 2 of 2 \(pdf\)](#)
- [iVotronic Logic and Accuracy Testing \(Nov. 28, 2001\) \(pdf\)](#)
- [Letter from Sequoia to NM Secretary of State's Office \(Oct. 1, 2003\) \(pdf\)](#)
- [Sequoia Card Activator Poll Worker's Manual \(pdf\)](#)
- [Sequoia Edge Audio Accessory Poll Worker's/Operator's Manual \(pdf\)](#)
- [Sequoia Voting Systems AVC Edge Pollworker Manual \(pdf\)](#)
- [AVC Edge Operator's Manual \(pdf\)](#)

Pennsylvania

- [EPIC's Public Records Request to Pennsylvania \(pdf\)](#)
- [Reply from Pennsylvania \(pdf\)](#)
- [Sequoia \(pdf\)](#)
- [Pennsylvania DRE Exams \(pdf\)](#)

Texas

- [Communication Among TX Examiners on Certification Process \(pdf\)](#)
- [Communication 2002 E-mail \(pdf\)](#)
- [Communication 2003 E-mail \(pdf\)](#)
- [Diebold \(pdf\)](#)
- [ES&S Part 1 of 2 \(pdf\)](#)
- [ES&S Part 2 of 2 \(pdf\)](#)
- [Hart InterCivic Part 1 of 2 \(pdf\)](#)
- [Hart InterCivic Part 2 of 2 \(pdf\)](#)
- [IMARK \(pdf\)](#)
- [Texas Public Records Second Request and Reply \(pdf\)](#)

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elected clerk positions. These election officials are often not barred from engaging in partisan political efforts, some going so far as to serve in statewide campaign positions or actively campaign for candidates. Election Administrators' relationship with voting technology vendors raises issues. The communities of voters and non-voters have the right to a voting system and public election process whose honesty, accuracy, and integrity are without question. Today these fundamental rights are under assault by the local and state governments offices that are responsible for the administration of public elections. It is NCVI's goal to restore integrity in our nation's election system by arming citizens and voting advocacy groups with the knowledge that will empower them to be effective agents of change.

EPIC's DRE Public Information Requests to States

Ohio

- E-Mails between the State of Ohio and Diebold regarding a demonstration and reliability of their voting equipment
- Representations made by Diebold to the State of Ohio regarding its AccuVote Voting Machine
- Wyle Laboratory Independent Testing Authority (ITA) Report on the AccuVote Voting Machine
 - Part 1 Technical assessment of the machine conflicts with representations Diebold made to OH
 - Part 2
 - Part 3
 - Part 4
 - Part 5
- Wyle Laboratory Independent Testing Authority (ITA) Report on Qualification Testing of the AccuVote ES-2000 Vote Tally System
 - Part 1
 - Part 2
 - Part 3
 - Part 4
 - Part 5
 - Part 6

New Mexico

- Wyle Document Transmittal No. 45827B Test Report 45827-01 (pdf)
- Test Report - Qualification Testing AVC Edge DRE Voting Machine Rep. #44733-01 Part 1 of 2 (pdf)
- Test Report - Qualification Testing AVC Edge DRE Voting Machine Rep. #44733-01 Part 2 of 2 (pdf)
- Test Report - Qualification Testing iVOTRONIC 2000 DRE Prec. Counter #45827-01 Part 1 of 2 (pdf)
- Test Report - Qualification Testing iVOTRONIC 2000 DRE Prec. Counter #45827-01 Part 2 of 2 (pdf)
- Test Report - Change Release Report of AVC Edge Firmware #44733-06 (pdf)
- Operations Manual Table of Contents (pdf)
- The ES&S iVotronic Voting System Operator's Manual (pdf)

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Geoffrey S. Connor
Secretary of State

REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S ACCU-VOTE TS BALLOT STATION v. 4.1.15

PRELIMINARY STATEMENT

On September 10, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Accu-Vote TS Ballot Station system for modification and reexamination in compliance with House Bill 1419, 77th Legislature, 2001, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system had been previously examined in May 2002. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference. After the September 10th examination, the vendor made changes based on the initial examiner reports. The re-examination was conducted on January 3, 2003 at the Secretary of State's office in Austin. Mr. Osborn and Mr. Glover attended this examination and their reports are attached. The version numbers reflect those presented at the January 3rd examination. A copy of a letter from the vendor explaining the modification is also attached to the certification.

BRIEF DESCRIPTION OF THE ACCU-VOTE TS BALLOT STATION

The Accu-Vote TS Ballot Station is a modification to the previously certified Accu-Vote TS Direct Record Electronic voting machine. The modified system features a larger, color screen, and a thermal printer. The version presented for examination was version 4.1.15.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

The Accu-Vote TS Ballot Station v. 4.1.15:

1. Preserves the secrecy of the ballot;
2. Is suitable for the purpose for which it is intended;
3. Operates safely, efficiently, and accurately;
4. Is safe from fraudulent or unauthorized manipulation;
5. Permits voting on all offices and measures to be voted on at the election;
6. Prevents counting votes on offices and measures on which the voter is not entitled to vote;
7. Prevents counting votes by the same voter for more than one candidate for the same office or, in elections in which a voter is entitled to vote for more than one candidate for the same office, prevents counting votes for more than the number of candidates for whom the voter is entitled to vote;
8. Prevents counting a vote on the same office or measure more than once;
9. Permits write-in voting;
10. Is capable of permitting straight-party voting; and



DEPARTMENT OF INFORMATION RESOURCES

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June 13, 2002

CAROLYN PURCELL
Chief Information Officer
State of Texas

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RE: Examination of Accu-Vote TS R6 Voting Hardware from Global Election Systems (GES)

Dear Ms. McGeehan:

I attended a scheduled examination May 21, 2002, at 9:30 am, for the purpose of examining the Global Election Management Systems (GEMS) hardware. The report below summarizes my findings.

Voting Systems Versions

| Hardware/Software Version | Date Previously Certified |
|--|---------------------------|
| AccuVote-TS R-6 Touchscreen (DRE) 4.1.11 | May 2001 |
| AccuVote-ES-2000 Optical Scan Reader 1.94W | January 2000 |
| Global Election Management System (GEMS) 1.17.17 | May 2001 |

Results of the examination

The Accu-Vote TS R6 has not changed significantly since the previous certification exam. However, some certification concerns emerged that were not addressed in the previous exam.

It appears that the zero tape required at initialization of the polls on Election Day is not required. This should not be optional. The system as demonstrated cannot be certified in this condition.

The PCMCIA card captures each voting unit's internal serial number. This is one of the security features that may help prevent vote fraud. It is suggested that a post-election audit module include a tally and report on all voting units to determine that the serial number of all units sent out matches the serial number of all units that were counted by the tally software.

The audit log did not print an entry when a data transmission failed. Interrupting the audit log printer itself did not generate a system error or halt processing. This is an unacceptable condition that must be addressed before the equipment can be certified for sale in the state.

Election Setup / Tabulation

| | |
|---------------------|---|
| Results Storage | Encrypted, proprietary database on the hard drive. |
| Tamper Resistance | The OS is locked down during tabulation and the data is encrypted. |
| OS access | None during tabulation. |
| Real-Time Audit Log | There is a log printer, but the system continues to function when the printer is offline. Messages are queued and printed when the printer comes back online. |
| Data Integrity | The Diebold representatives did not know what measures are taken to be sure that the data remains consistent after a failure. See below. |

Election Setup / Tabulation: Questions, Risks and Problems

7. GEMS did not log an attempt to repeat the upload of the results from a precinct, although it did log the fact that a connection was made without transmitting anything.
8. GEMS continued to operate after the real-time audit log printer was disabled. The system should be disabled whenever that printer is not operating, whatever the reason. *The system does not comply with the Secretary of State's rules, and should not be certified until this is fixed.*
9. The Diebold representatives did not know what measures are taken to be sure that the data remains consistent after a failure. For example, if precinct results are being loaded when the power fails on the tally system, either all totals should be updated and the precinct marked "tabulated," or no totals should be updated and the precinct not marked "tabulated." The database should never be left in an inconsistent state. *The system should not be certified until this question has been satisfactorily answered.*

June 13, 2002

Page 2

Ms. Ann McGeehan

The demonstration did not include the correct test ballots for Texas, nor was the correct equipment demonstrated. It is suggested that at the next demonstration all equipment that may be needed to completely demonstrate the system be brought to the exam site.

Recommendations

The Department of Information Resources (DIR) recommends that the system, as demonstrated, not be certified until deficiencies with the log printer and zero tape have been remedied.

Respectfully,

A handwritten signature in black ink, appearing to read "Nick Osborn", followed by a horizontal line extending to the right.

Nick Osborn
Systems Analyst

CP:MM:NO:sk

| | |
|----------------------------|---|
| Transfer Results | PCMCIA cards or a modem. |
| Print precinct results | On the thermal printer |
| Straight party / crossover | Yes. Canceling a straight-party vote cancels all previously selected crossover votes without warning. |
| ADA | Yes, but ADA capability is verified separately by the Secretary of State's office, so it was not demonstrated to the examiners. |
| Notes | <ul style="list-style-type: none"> Each R6 is an independent stand-alone system, which can communicate with other stations or election central only when the polls are closed. In the event of an attempt to repeat the upload of a precinct's results, the event is logged on the printer at the R6. (However, at election central, the only thing that is logged is the fact that a session was opened and closed without uploading any results.) |

Voting: Questions, Risks and Problems

1. If a voter cancels a straight-party vote after having voted individual races, his crossover votes in the individual races are cancelled without a warning. This could cause him to cast votes different from what he intended. The Diebold representatives pointed out that this is plainly visible on the screen, and that he must step through every page, and can see all the votes that were changed. This is true, but since the voter may assume his previous results are unchanged, he has no reason to inspect each page closely for possible changes.
2. The R6 cannot enforce requirements to print pre- or post-election reports, such as a zero-total report. Poll workers must be trained to request the reports that are needed. These things should be determined during election setup, and produced automatically, so that training requirements and mistakes are minimized.
3. The R6 has only one level of security. The election judge can do anything that anyone can do. The more sensitive operations (such as clearing an election or deleting an election archive) should only be permitted with an additional security code, which is not given to the election judge unless an unusual situation arises.
4. When precinct results are tabulated, attempts to tabulate results from the same station twice are not recorded on the real-time audit log printer unless the operator says to overwrite the previous results. Also, the operator messages and responses are not recorded. For example, if an attempt is made to load a voting stations results twice, the operator will be told that it is a duplicate, and asked whether to overwrite or cancel. If he replies "cancel," nothing at all will be recorded on the real-time audit-log printer. It should record the failed attempt to load precinct data, the operator message, and the operator response. *The R6 should not be certified until this is fixed.*
5. When a modem upload fails, the printed audit log on the voting station still reports success. The screen correctly reports failure, even though the log is wrong. *The R6 should not be certified until this is fixed.*
6. If a voting station should fail, you can substitute a different one in the middle of the election. However, the representatives could not say whether the protective counter values are recorded in the log when the swap is made.

Voting System Examination Diebold Election Systems

Prepared for the
Secretary of State of Texas

James Sneeringer, Ph.D.
Designee of the Attorney General

This report comprises the findings of the Attorney General's designee from an examination of the equipment listed above, pursuant to Title 9, Chapter 122 of the Texas Election Code, section 122.036(b).

| | |
|-------------------------|--------------|
| Examination Date | May 21, 2002 |
| Report Date | May 25, 2002 |

| Purpose | Component | Version |
|----------------|-----------------------------------|----------------|
| Voting | AccuVote-TS R-6 | 4.1.11 |
| Scanning | AccuVote-ES 2000 | 1.94w |
| Election Setup | Global Election Management System | 1.17.17 |
| Tabulation | Global Election Management System | 1.17.17 |

Voting

| | |
|---|---|
| Election Setup | PCMCIA card. Nothing is pre-programmed in the terminals; all the election information is in the PCMCIA card. |
| Zero-total report | On the thermal printer. |
| Authorization to vote / Ballot selection | A manager card, when used with the manager password, allows any R6 to generate PCMCIA cards to authorize voting, and to perform other administrative functions. The PCMCIA cards are automatically erased after voting, so they cannot be reused. The manager card and password authorize someone to perform any operation that the R6 is capable of, including clearing elections (although the last copy is never erased). There is no hierarchy of management functions. |
| View / Vote | LCD display / touch screen |
| Vote Storage | Internal flash memory and on the PCMCIA card. |
| Precinct Consolidation | Any R6 can accumulate results from other R6 devices in the same precinct, and forward all the results to election central in a single modem call. The R6 has a real-time audit printer, but it does not record all significant tabulation events. |

The GEMS demonstration revealed that the tabulation features also did not meet the requirement of printing real-time audit events to a continuous feed printer. Instead GEMS spools the information, then prints audit events at a later point in processing. The AccuVOTE ES-2000 Optical Scan Reader was not presented because of a lack of time during the examination.

Based on these two observations, I recommend the AccuVote-TS and GEMS be not certified at this time for use in Texas elections until the real-time audit requirements are fulfilled for the tabulation function of the system. The presentation of the AccuVOTE ES-2000 Optical Scan Reader should be rescheduled for examination and consideration of certification.

All comments and recommendations are made in my capacity as an examiner of voting systems and are based on documentation and demonstrations provided by Diebold Election Systems Inc.

The State of Texas



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Gwyn Shea
Secretary of State

TO: Ann McGeehan
Elections Division Director

FROM: Glenn Glover
Voting System Examiner

DATE: June 3, 2002

A voting systems certification examination was held at the Office of the Secretary of State Elections Division on Tuesday morning, May 21 2002.

Diebold Election Systems Inc. submitted their election system products of the AccuVote-TS R-6 Touch screen DRE, AccuVOTE ES-2000 OPTICAL SCAN READER 1.94W, and the Global Election Management System (GEMS) version 1.17.17.

The AccuVote-TS unit operates on the Windows CE operating system and is controlled exclusively by touching the LCD and entering a smart card into the card reader. The AccuVote-TS unit operates in one of four states: Pre-Download Mode, Pre-Election Testing Mode, Election Mode, and Post-Election Mode. The AccuVote-TS retains the ballot image and corresponding result of every ballot counted in Pre-Election Testing mode as well as in Election Mode in both external media and internal storage.

The AccuVote-TS has an accumulator function that allows election results from all AccuVote-TS units to be accumulated to a single unit at the polling location. Once all results have been accumulated, they are tabulated, printed, and results are transferred to the host computer running the GEMS software.

The examination revealed that as the AccuVote-TS performs its accumulation function, it does no real-time print of audit information to its continuous feed printer which is a requirement of all vote tabulation device used in Texas elections. If the AccuVote-TS only collected the individual election information from each AccuVote-TS units, then transferred the raw election data to GEMS, real-time printing would not be a requirement because it would not tabulate results. The AccuVote-TS unit can print audit information but only through a menu option, not in real-time.

GEMS is Diebold's election management software solution that operates in the Microsoft Windows NT environment. The software is involved in all phases of the election process. GEMS is responsible for the definition of jurisdictional information, the creation of ballot content and ballot artwork. GEMS also manages voting device media programming, election results consolidation and tallying, as well as provides election results reporting tools.

Ann McGeehan
Deputy Assistant Secretary of State
Diebold Election Systems AV-TSR6, etc.

3

May 21, 2002

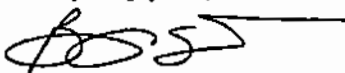
During the examination, the Vendor demonstrated GEMS to function at election central as automatic tabulation equipment and as capable of satisfactorily tabulating votes. However, GEMS again permitted operations and tabulation when the required real-time log printer was not attached, was turned off, etc. This continues to be a problem based on some prior examinations. In addition, as GEMS existed when demonstrated on May 21, 2002, the real time log printer did not fully and adequately log all events, error messages, entries and instructions from the keyboard and other functions. The election central log printer function was not demonstrated to materially comply in any respect with the requirements for an audit trail, or log printers.

I recommend that GEMS not be certified as meeting the requirements of Chapt. 122, Subchapt. A, Texas Election Code, until such time as GEMS is modified to (1) automatically stop the function of election central if the real-time log printer is disconnected or turned off; and (2) require the real time log printer to record all events, failed attempts, error messages, keyboard entries, etc. Based upon my observations and examination, GEMS will not satisfy the requirements of Chapt. 122 until these requirements are satisfied.

AccuVote-ES 2000 Optical Scan Reader Version 1.9W.

The Scan Reader is automatic tabulating equipment and accurately tabulated ballots during the examination. However, the required log printer was not adequate to perform the required tasks to produce an audit trail. The real time log printer printed on the same tape as the printout for reporting the tabulation of precinct results. As a result, the real time log printer tape was required to be removed with the precinct tabulation tape. Further, the printer did not record all events required for an adequate audit log. Based upon my observations and examination, the Scan Reader is accurate in the scanning and recording of votes but will not satisfy the requirements of Chapt. 122 until the requirements for a real time log printer are satisfied.

Very truly yours,



Barney L. Knight

AV-TSR6. Use as a voting station. The AV-TSR6 is an upgrade of the previously certified AV-TSR6. The AV-TSR6 is a DRE device that allows a voter to vote by touching the LCD Screen. The AV-TSR6 is programmed for the election by using the Gems, V. 1.17.17, to use a PCMCIA card to load media into the AV-TSR6. The AV-TSR6 stores both ballot images and election results, as votes are cast. The voter accesses the AV-TSR6 by use of a "Smart Card" which results in the proper ballot being presented for the voter and the activation of the machine for voting. The results are recorded in both the internal memory and the external PCMCIA. The AV-TSR6 appears to have and perform all the requirements and functions required for a voting machine.

No computer is required at the precinct level. At the close of election, each AV-TSR6 will print the required election results tape for the machine, and the votes may be tabulated at the precinct level and at election central using the PCMCIA cards. The printer generally functioned adequately for use as a voting machine. However, I recommend the Secretary consider imposing two requirements for certification of the AV-TSR6, V. 4.1.11, as follows: (1) The election judge can enable the machine for voting without producing a zero votes printout. The machine will print a fully adequate zero report tape and should be required to do so before being able to be opened for voting. (2) The AV-TSR6 will print both an abbreviated tape and a full report tape at the close of voting. The abbreviated tape does not include some required information, e.g. undervotes. I recommend the Secretary require a modification so as to enable the machine to produce only the tape that reports all required information. In my opinion, with the two recommended modifications the AV-TSR6 meets the requirements of the Texas Election Code and is appropriate for certification by the Secretary for use as a voting machine.

AV-TSR6. Use as precinct tabulation equipment. The device appeared to accurately tabulate votes when the PCMCIA cards from other voting machines were read into the device. However, the required real time log printer was wholly inadequate. The real time log printer printed on the same tape as the printout for the AV-TSR6 use as a voting machine, and the same tape was used for reporting the tabulation of precinct results. As a result, the real time log printer tape was required to be removed with the voting machine tape, and again with the precinct tabulation tape. Further, the real time log printer did not record numerous events. As examples: it recorded the sending of data, but not that the sending of the data had failed; it did not report error messages; and it did not report all other attempts to interface with or use the machine as tabulation equipment. I recommend the AV-TSR6 not be certified as automatic tabulation equipment for the collection and tabulation of precinct results until such time as the real time log printer functions in a manner to record all events and to preserve an audit trail.

GEMS Software. GEMS provides a single data base for the entire election. The Touchscreen voting station stores ballot images on the PCMCIA card and on the hard drive. The ballot images are randomly distributed in storage. Each of the voting stations has a separate ID# that transmits to GEMS, and there are multiple ID#s applicable to each election, e.g. precinct number, copy number machine number, and election number.

**Barney Knight
& Associates**

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Attorneys
Barney L. Knight
Theresa L. Johnson
Gregory D. Henshaw

May 21, 2002

Ann McGeehan
Deputy Assistant
Secretary of State
P.O. Box 12060
Austin, Texas 78711-2060

Re: Diebold Election Systems ("Global") AccuVote-TS R6 Version 4.1.11 ("AV-TSR6"), AccuVote-ES 2000 Optical Scan Reader Version 1.9W ("Scan Reader"), and Global Election Management System Version 1.17.17 ("GEMS")

Dear Ms. McGeehan:

Pursuant to my appointment as an examiner under §122.035 of the Texas Election Code, I attended a scheduled examination on Tuesday, May 21, 2002, for the purpose of examining the above referenced AccuVote TS R6, the Scan Reader and Gems. At that time, Diebold made a presentation and the examiners were able to ask questions and examine the use and function of the AV-TSR6, the Scan Reader and GEMS. The efficiency of the examination was limited due to Diebold having to interrupt the examination to prepare an election that would enable the examiners to review and examine the function of required straight party and other abilities.

In that examination, I relied upon representations of Diebold concerning operation of the software and electronic components. Those representations were made during an extended examination and were considered together with those contained in the printed materials for the AV-TSR6, Scan Reader and Gems. Other than examining the materials provided, observing the demonstration, presenting questions and observing the response of Diebold to my questions and those presented by the other examiners, I did not conduct an independent examination of the software or the electronic components.

This report is concerned solely with the ability of the AV-TSR6, Scan Reader and Gems to operate and comply with Texas Election Law. No opinion is expressed regarding the suitability of the system for the purposes of or use by any jurisdiction. The AV-TSR6 is a voting machine and voting system equipment, the Scan Reader is automatic tabulation equipment, and GEMS is the operating system for an electronic voting system as those terms are defined in § 121.003, *Tex. Elec. Code*.

Diebold Election Systems

The Diebold system was examined in Austin on May 21, 2002. The system is made up of three sub-systems. The names and current releases are as follows:

Accuvote-TS - version 4.1.11 - DRE voting machine
Accuvote-ES2000 - version 1.9.4w - optical scan reader
Gems- version 1.17.17 - election preparation, tally and reporting system

The system as demonstrated requires the following corrections in order to satisfy the requirements of the Texas Election Code:

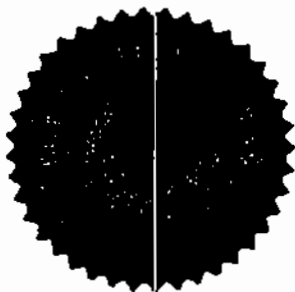
- If a different TS machine is needed during the course of an election, the new machine's protective counter value should be written to the audit log.
- The precinct report must use the "long" format that indicates the under-voting.
- Accumulation on a TS machine did not record all significant events (i. e. a second attempt to load the same PCMCLA card).
- The failure to transfer the precinct results from the TS was not logged on the TS audit log nor the GEMS log.
- Tabulation was able to continue in GEMS even though the audit log printer was off-line.
- The demonstration did not use a laptop to initialize the TS activation cards as would be done for a real election. All equipment and sub-systems used must be demonstrated.

Conclusion

The system does not meet the standards outlined in the Texas Election Code. I do not recommend certification of the system.

Tom Watson
Examiner

Certified under my hand and seal of office, this 1st day of August, 2002.



Gwyn Shea

Gwyn Shea
Secretary of State

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REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S GLOBAL ELECTION MANAGEMENT SYSTEM, v. 1.17.17

PRELIMINARY STATEMENT

On May 21, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Global Election Management (GEMS) system for reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system was formerly distributed by Global Election Systems. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF GEMS

GEMS is a computer program that prepares ballots and reads and tabulates precinct election results recorded on IMATON 120 megabyte floppy disks or transmitted by modem. The version presented for examination was GEMS, v. 1.17.17.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

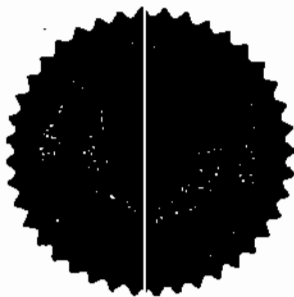
GEMS v. 1.17.17 does not meet the standards for certification as prescribed by Section 122.001 of the Texas Election Code. Specifically, the system:

1. is not suitable for the purpose for which it is intended;
2. does not operate safely, efficiently, and accurately;
3. is not safe from fraudulent or unauthorized manipulation; and
4. is not capable of providing records from which the operation of the voting system may be audited.

CONCLUSION

The voting systems examiners noted that tabulation was able to continue in GEMS even though the audit log printer was off-line and recommended that the system not be re-certified until this was remedied. Accordingly, I hereby deny the Vendor's application for recertification of the GEMS voting system for use after December 31, 2002.

Certified under my hand and seal of office, this 1st day of August, 2001.




Gwyn Shea
Secretary of State

The State of Texas

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REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S ACCU-VOTE ES 2000 v.1.9.4w

PRELIMINARY STATEMENT

On May 21, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Accu-Vote ES 2000 optical scan voting system for reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system was formerly distributed by Global Election Systems. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Glover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF THE ACCU-VOTE ES 2000

The Accu-Vote ES 2000 is a mark sense optical scan ballot reader. The version presented for examination was 1.9.4w

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

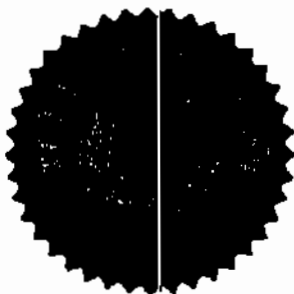
The Accu-Vote ES 2000 v. 1.9.4w does not meet the standards for certification as prescribed by Section 122.001 of the Texas Election Code. Specifically, the system:

1. is not suitable for the purpose for which it is intended;
2. does not operate safely, efficiently, and accurately;
3. is not safe from fraudulent or unauthorized manipulation; and
4. is not capable of providing records from which the operation of the voting system may be audited.

CONCLUSION

The voting systems examiners noted that the audit log failed to record all significant events at the point of tabulation and recommended that the system not be re-certified until this was remedied. Accordingly, I hereby deny the Vendor's application for recertification of the Accu-Vote ES 2000 system for use after December 31, 2002.

Certified under my hand and seal of office, this 1st day of August, 2001.



Gwyn Shea

Gwyn Shea
Secretary of State

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REPORT OF EXAMINATION OF DIEBOLD ELECTION SYSTEMS, INC.'S ACCU-VOTE TS R6 v.4.1.11

PRELIMINARY STATEMENT

On May 21, 2002, Diebold Election Systems, Inc. (the "Vendor") presented its Accu-Vote TS R6 system for modification and reexamination in compliance with House Bill 1419, 77th Legislature, which requires reexamination of all voting systems of each county to determine whether the voting system continues to comply with the minimum applicable standards prescribed by law. The system was formerly distributed by Global Election Systems. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Nick Osborn, an expert in electronic data communication systems;
2. Mr. Tom Watson, an expert in electronic data communication systems;
3. Mr. Barney Knight, an expert in election law and procedure; and
4. Mr. Glenn Clover, an expert in electronic data communication systems.

Pursuant to Section 122.035(a), the Texas Attorney General appointed Dr. Jim Sneeringer, an expert in electronic data communication systems.

The Vendor first demonstrated the system; the examiners thoroughly examined the system. Examiner reports on the system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF THE ACCU-VOTE TS R6

The Accu-Vote TS R6 is a modification to the previously certified Accu-Vote TS Direct Record Electronic voting machine. The modified system features a larger, color screen, and a thermal printer. The version presented for examination was version 4.1.11.

FINDINGS

The following are my independent findings, based on oral evidence presented at the examination, written evidence submitted by the Vendor in support of its application for certification, and the findings of our voting system examiners as set out in their written reports.

The Accu-Vote TS R6 v. 4.1.11 does not meet the standards for certification as prescribed by Section 122.001 of the Texas Election Code. Specifically, the system:

1. is not suitable for the purpose for which it is intended;
2. does not operate safely, efficiently, and accurately;
3. is not safe from fraudulent or unauthorized manipulation; and
4. is not capable of providing records from which the operation of the voting system may be audited.

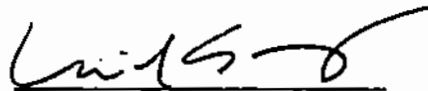
CONCLUSION

The voting systems examiners noted that the audit log failed to record all significant events at the point of tabulation and recommended that the system not be re-certified until this was remedied. Accordingly, I hereby deny the Vendor's application for recertification of the Accu-Vote TS R6 system for use after December 31, 2002.

CONCLUSION

The examiners determined that the Vendor had resolved the problems they identified in the earlier September 2002 examination of the system. Accordingly, I hereby grant the Vendor's application for re-certification of the Accu-Vote TS Ballot Station voting system.

Signed under my hand and seal of office, this 7th day of October, 2003.



Luis Saenz
Assistant Secretary of State

US Count Votes
National Election Data Archive Project
Working Paper

Patterns of Exit Poll Discrepancies

**More On the Implausibility of a “Uniform” Bias Explanation for the
2004 Presidential Election Exit Poll Discrepancies**

May 5, 2005

Ron Baiman, Ph.D – Institute of Government and Public Affairs, University of Illinois at Chicago
Kathy Dopp -MS in mathematics - USCountVotes, President
Richard G. Sheehan, Ph.D. - Professor, Department of Finance, University of Notre Dame
Paul F. Velleman, Ph.D. - Associate Professor, Department of Statistical Sciences, Cornell University

Reviewed via USCountVotes' email discussion list for statisticians, mathematicians and pollsters.

Press Contact:

Kathy Dopp, US Count Votes, President kathy@uscountvotes.org

US Count Votes thanks **Bruce O'Dell** - Partner, Digital Agility and USCountVotes, Vice President for contributing his programmed exit poll simulations results to this paper.

This paper can be found on the Internet at:

http://uscountvotes.org/ucvAnalysis/US/exit-polls/USCV_exit_poll_simulations.pdf

Abstract

New evidence from mathematical simulations conclusively shows that any constant mean exit poll response bias hypothesis such as the "reluctant Bush responder" (rBr) hypothesis is not consistent with the pattern shown by the Edison/Mitofsky exit polling data. Other explanations are required to explain the Edison/Mitofsky pattern of exit poll discrepancies and overall response rates.

US Count Votes' simulations have demonstrated that exit poll patterns in the November 2004 presidential election could be produced by an exit poll response bias distribution with constant mean if accompanied by shifting of votes cast for Kerry to Bush; or alternatively, the patterns could be caused by a differential pattern of exit poll response bias that would require further explanation.

E/M hypothesized that the discrepancy between their exit poll results and the reported vote was due to different exit poll response rates by Kerry and Bush voters. However, US Count Votes' simulations show that no plausible Kerry and Bush response rate distributions with constant mean can (with any realistic chance) reproduce the distribution and values of the Edison/Mitofsky¹ data for mean "within precinct error" (WPE), median WPE, and overall response rates.²

US Count Votes has simulated a variety of exit poll response rate (Gaussian³) distributions for Bush and Kerry voters and studied the resulting exit poll within precinct error distributions. The simulations thus far suggest that possible ways to reproduce patterns of mean and median WPEs, and overall response rates that resemble the distribution of the actual reported E-M exit poll data include:

voter exit poll response rate distributions with means that vary widely with the percentage of Bush and Kerry votes cast in precincts.

voter response rate distributions with constant mean like the rBr hypothesis, accompanied by vote shifts from Kerry to Bush.

Introduction

This paper continues the debate surrounding the discrepancies between the exit polls and the official election results in the November 2004 presidential election, and introduces new evidence that supports the hypothesis that a shift of votes cast for Kerry to Bush is consistent with these exit poll discrepancies.

This paper is written for the lay person, as much as possible. Algebraic and technical derivations and explanations are reserved for its Appendices.

Edison/Mitofsky proposed a hypothetical exit poll response rate for Kerry and Bush voters of 56% and 50% respectively to explain the exit poll discrepancies.⁴ An earlier study of the exit poll discrepancies by US Count Votes was released on March 31, 2005⁵. Liddle recently published⁶ a simulation-based analysis of exit poll errors which has been interpreted to suggest that response bias

¹ "Evaluation of the Edison/Mitofsky Election System 2004" January 19, 2005
<http://www.exit-poll.net/election-night/EvaluationJan192005.pdf>

² See Appendices E through G for derivation of the equations used to simulate WPE that would be produced from the Kerry and Bush hypothesized response rates and the percentage of Kerry and Bush votes in precincts.

³ A Gaussian distribution is a symmetrical distribution around a fixed mean, somewhat like a normal curve distribution.

⁴ E-M 2005 Exit Poll Report p. 31. released on January 19, 2005. See footnote 1.

⁵ "Analysis of the 2004 Presidential Election Exit Poll Discrepancies" by the National Election Data Archive project.

⁶ See <http://www.geocities.com/lizziclid/WPEpaper.pdf>

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US Count Votes also simulated the effect of shifting votes cast for Kerry to Bush to determine the patterns of Mean WPE that might result from hypothetical vote embezzlement. Simulations are only used in the absence of detailed source data. Edison/Mitofsky could help us resolve the lingering questions about exit poll discrepancies by releasing the data to enable us to directly measure – rather than infer – precinct level variance between poll results and official vote tallies.

US Count Votes will publish the information needed to reproduce its two simulations on its web site <http://electionarchive.org/ucvAnalysis/exit-polls>

Pattern in Precincts Where Bush Vote Was Over 80%

In our March 31st paper we noted that the E/M reported mean and median WPE for precincts where the Bush vote was greater than 80% was -10% and -5.8% respectively. This implies that half of these 40 high Bush vote precincts had very large WPEs of at least -14.2%.⁹

US Count Votes could reproduce the E-M pattern in these precincts with a large difference between Kerry and Bush response rates – in some cases 40% or more, or by shifting votes from Kerry to Bush. USCV's vote shift simulator will be upgraded to account for the distribution of precincts.

The total number of these high-Bush vote precincts sampled is small – only 40 out of 1250 precincts in Edison/Mitofsky's sample. If votes were shifted from Kerry to Bush in the 415 precincts in the 60% to 80% Bush vote precincts, then some of these 60% to 80% precincts, with high mean WPEs would "shift" to the 80% to 100% group. Hence, mean WPE in the 80% to 100% Bush vote grouping may be very sensitive to vote shifting due to its small number of precincts. i.e. Much greater increases in WPE would occur when votes are shifted from a larger number of precincts to a smaller number of precincts than vice versa.

Analysis of the Aggregate Edison/Mitofsky Data¹¹

The Edison/Mitofsky report only provides summary statistics, not precinct-level data.

To analyze their data, one approach is to simulate precinct-level values whose summaries mimic the E/M reported results. For those simulations, one can specify a mean and standard deviation of possible voter response rates to assess the effect that such a bias is likely to have on the overall exit poll errors. One can also simulate the effect that systematic, but random vote shifts might have on the apparent exit poll errors.

Another approach is to analyze the aggregate data. Means and medians are generally regarded as good descriptors of reasonably well behaved (approximately normally distributed) aggregate data like exit poll data. Simple parameters calculated from means and medians of aggregate data can be regarded as fairly good indicators of the mean and median values of the same parameters calculated from individual data points.

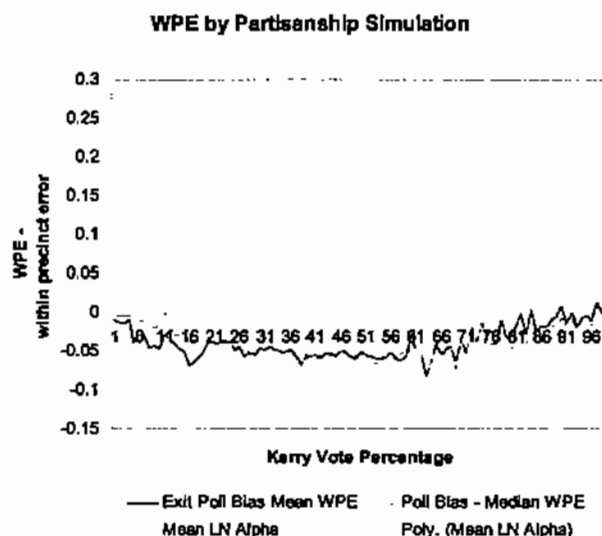
An analysis of the aggregated Edison/Mitofsky data (see Appendix E by Ron Baiman) suggests that it is highly improbable that the exit poll outcomes described in the E/M report are a result of a randomly distributed "exit poll bias" for Kerry and Bush voters, regardless of the mean response rates for Kerry or Bush voters.

⁹ USCV, April 2005, op. cit., p. 14. http://electionarchive.org/ucvAnalysis/US/Exit_Polls_2004_Edison-Mitofsky.pdf

¹¹ See Appendix E by Ron Baiman

may be able to account for some aspects of Edison/Mitofsky's reported exit poll discrepancies. In order to fully understand Liddle's simulations and to provide additional tests of Edison-Mitofsky's reluctant Bush responder (rBr) hypothesis, US Count Votes reproduced Liddle's simulation model with simulations that can calculate mean and median WPE and response rates that would result from hypothetical Kerry and Bush exit poll response biases. In addition, US Count Votes created a simulation to show the effect on WPE of vote shifts from Kerry to Bush.

Liddle's work was presented by Mitofsky at the recent Miami conference of the AAPOR⁷. The chart below is a simulation of Liddle's alpha bias measure (top jagged line) for evaluating exit poll response rate bias for separate distributions (Gaussian) for Kerry and Bush response rates based on overall means of 56% and 50% respectively with standard deviations which allow more variation in areas where sample sizes are smaller. You can see that the best fit polynomial curve of the means for Liddle's alpha values is almost linear - a benefit for using alpha to measure exit poll bias.



Those who would like to understand how to derive Liddle's formulas from the work of Dopp, Baiman, and other US Count Votes' volunteers can read Appendices C and D.⁸



US Count Votes' simulations showed that (Gaussian) distributions of Kerry and Bush voter response rates with means of 56%/50% did not reproduce the patterns which are found in the E/M data for mean "within precinct error" (WPE), median WPE, and overall response rates.

Some aspects of E/M's data could be reproduced for *some* types of precincts, but overall we found that that no simulation of randomly distributed Kerry/Bush response rates with fixed means can reproduce the overall distribution and values of the Edison/Mitofsky data for mean WPE, median WPE, and reported precinct response rates. The ten percent of E/M precincts that fell in the High-Kerry and High-Bush categories were especially difficult to reconcile. There is a risk that by ignoring it we may overlook the key to understanding the source of the exit poll discrepancy.

⁷ May 12-14, 2005. AAPOR is the American Association of Public Opinion Researchers.

⁸ According to personal email correspondence with Dopp, Liddle was recently hired on a temporary basis by Mitofsky to explain her alpha bias measure for exit poll response rates of Bush and Kerry voters which is also explained clearly in Appendices C and D in this paper. Alpha is equal to the natural log of the ratio of Kerry to Bush response rates.

truthout • editorial

 Print This Story [Go to Original](#)**On the Voting Machine Makers' Tab**
The New York Times | Editorial

Sunday 12 September 2004

As doubts have grown about the reliability of electronic voting, some of its loudest defenders have been state and local election officials. Many of those same officials have financial ties to voting machine companies. While they may sincerely think that electronic voting machines are so trustworthy that there is no need for a paper record of votes, their views have to be regarded with suspicion until their conflicts are addressed.

Computer scientists, who understand the technology better than anyone else, have been outspoken about the perils of electronic voting. Good government groups, like Common Cause, are increasingly mobilizing grass-roots opposition. And state governments in a growing number of states, including California and Ohio, have pushed through much-needed laws that require electronic voting machines to produce paper records.

But these groups have faced intense opposition from election officials. At a hearing this spring, officials from Georgia, California and Texas dismissed concerns about electronic voting, and argued that voter-verifiable paper trails, which voters can check to ensure their vote was correctly recorded, are impractical. The Election Center, which does election training and policy work, and whose board is dominated by state and local election officials, says the real problem is people who "scare voters and public officials with claims that the voting equipment and/or its software can be manipulated to change the outcome of elections."

What election officials do not mention, however, are the close ties they have to the voting machine industry. A disturbing number end up working for voting machine companies. When Bill Jones left office as California's secretary of state in 2003, he quickly became a consultant to Sequoia Voting Systems. His assistant secretary of state took a full-time job there. Former secretaries of state from Florida and Georgia have signed on as lobbyists for Election Systems and Software and Diebold Election Systems. The list goes on.

Even while in office, many election officials are happy to accept voting machine companies' largess. The Election Center takes money from Diebold and other machine companies, though it will not say how much. At the center's national conference last month, the companies underwrote meals and a dinner cruise.

Forty-three percent of the budget of the National Association of Secretaries of State comes from voting machine companies and other vendors, and at its conference this summer in New Orleans, Accenture, which compiles voter registration databases for states, sponsored a dinner at the Old State Capitol in Baton Rouge.

There are also reports of election officials being directly offered gifts. Last year, the Columbus Dispatch reported that a voting machine company was offering concert tickets and limousine rides while competing for a contract worth as much as \$100 million, if not more.

When electronic voting was first rolled out, election officials and voting machine companies generally acted with little or no public participation. But now the public is quite rightly insisting on greater transparency and more say in the decisions. If election officials want credibility in this national discussion, they must do more to demonstrate that their only loyalty is to the voter.

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Today's TO Features 

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[Go to Original](#)**More Troubles for Diebold**
The New York Times | Editorial

Monday 04 October 2004

Diebold, the much-criticized electronic voting machine company, got another black eye last week. A federal court in California ruled that it had violated federal law when it falsely charged two students with violating its copyrights by posting critical information about its voting machines on the Internet. The case raises more questions about Diebold's honesty and its commitment to transparency.


The story began early last year when someone - it is unclear who - posted internal Diebold e-mail messages on the Internet that discussed flaws in the company's electronic voting machines. Two students from Swarthmore College then posted those messages on various Web sites. Diebold sent out a flurry of cease-and-desist letters claiming that the postings violated its copyrights. The students sued, charging that Diebold knowingly misrepresented its rights under copyright law.

The United States District Court for the Northern District of California agreed. Under the Digital Millennium Copyright Act, it is illegal to send a cease-and-desist letter while knowing that the claim of copyright infringement is false. The court held that Diebold knew that its e-mail messages "discussing possible technical problems" with its voting machines were not copyrighted, but went ahead anyway.

This is the second recent setback to Diebold's already troubled reputation. Last month, California's attorney general, Bill Lockyer, joined a false-claims suit against Diebold charging it with lying to the state about the security of its voting systems. Now, a federal court has ruled that Diebold made knowing misrepresentations to get damaging information about its machines' security off the Internet.

Diebold has a great deal to do to make its work transparent and its company trustworthy if it wants to remain in the elections business.

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